

## Multiplying polynomials - Fractions - Simplify product of binomials and trinomials

**Simplify product of fractions with one variable:**

1)  $\left(2x - 3\frac{1}{4}\right)\left(\frac{1}{2}x^2 - 1\frac{1}{2}x - 1\frac{1}{5}\right)$

2)  $\left(4\frac{1}{4}m + 1\frac{2}{3}\right)\left(\frac{6}{7}m^2 + 2m + 1\frac{1}{7}\right)$

3)  $\left(2\frac{5}{8}p - 3\frac{3}{4}\right)\left(\frac{5}{6}p^2 + \frac{3}{7}p - 3\frac{6}{7}\right)$

4)  $\left(\frac{3}{4}b - 1\frac{1}{2}\right)\left(1\frac{3}{4}b^2 - \frac{2}{3}b + \frac{2}{3}\right)$

5)  $\left(1\frac{5}{8}n - 1\frac{1}{3}\right)\left(2\frac{1}{2}n^2 + 1\frac{5}{7}n - 1\frac{3}{4}\right)$

6)  $\left(2\frac{3}{8}r - 4\frac{3}{4}\right)\left(1\frac{1}{3}r^2 + 3\frac{1}{2}r + 2\frac{7}{8}\right)$

7)  $\left(1\frac{3}{8}n + \frac{1}{2}\right)\left(\frac{2}{3}n^2 + n + 2\right)$

8)  $\left(1\frac{1}{5}a + 3\frac{5}{6}\right)\left(1\frac{2}{3}a^2 - 1\frac{4}{7}a - 3\frac{3}{5}\right)$

9)  $\left(x + \frac{5}{8}\right)\left(\frac{5}{6}x^2 - 1\frac{3}{4}x - \frac{1}{5}\right)$

10)  $\left(2v - 1\frac{2}{3}\right)\left(4\frac{1}{2}v^2 + 1\frac{1}{2}v - 2\frac{1}{6}\right)$

11)  $\left(1\frac{2}{5}x - \frac{1}{2}\right)\left(1\frac{2}{3}x^2 + 2\frac{1}{7}x + 1\frac{1}{4}\right)$

12)  $\left(1\frac{3}{5}a - \frac{3}{5}\right)\left(2\frac{1}{2}a^2 + 3\frac{5}{6}a + 3\right)$

13)  $\left(\frac{1}{2}x - 1\frac{3}{7}\right)\left(\frac{2}{5}x^2 + 1\frac{1}{8}x - 3\frac{6}{7}\right)$

14)  $\left(3\frac{1}{2}k + 2\frac{2}{7}\right)\left(1\frac{3}{4}k^2 + 1\frac{2}{3}k - 1\frac{1}{4}\right)$

15)  $\left(\frac{1}{6}p + \frac{1}{3}\right)\left(1\frac{1}{2}p^2 + 2\frac{1}{2}p - 2\frac{1}{6}\right)$

16)  $\left(1\frac{1}{2}x + 2\frac{3}{4}\right)\left(3\frac{5}{7}x^2 - 2x + 1\frac{1}{6}\right)$

17)  $\left(\frac{2}{5}n + 3\frac{1}{8}\right)\left(4\frac{3}{7}n^2 - 1\frac{2}{3}n + 4\frac{5}{6}\right)$

18)  $\left(3\frac{2}{3}m + 1\right)\left(\frac{2}{3}m^2 - 2\frac{1}{5}m - 1\frac{1}{2}\right)$

$$19) \left(\frac{1}{2}x + 7\frac{4}{5}\right)\left(4\frac{5}{8}x^2 + 3\frac{3}{8}x - 2\frac{4}{7}\right)$$

$$20) \left(1\frac{5}{6}r + 1\frac{2}{5}\right)\left(4\frac{1}{5}r^2 + \frac{2}{5}r + \frac{1}{3}\right)$$

$$21) \left(1\frac{2}{3}b + \frac{1}{2}\right)\left(\frac{3}{5}b^2 - \frac{1}{3}b + \frac{5}{7}\right)$$

$$22) \left(2\frac{4}{5}n + 3\frac{1}{4}\right)\left(\frac{5}{7}n^2 + 1\frac{1}{5}n - \frac{1}{3}\right)$$

$$23) \left(4\frac{1}{6}v - \frac{4}{7}\right)\left(\frac{1}{4}v^2 - \frac{2}{5}v + 1\right)$$

$$24) \left(2x - \frac{4}{7}\right)\left(3\frac{1}{8}x^2 - 2\frac{1}{3}x + 5\right)$$

$$25) \left(4\frac{5}{6}n + \frac{2}{5}\right)\left(1\frac{2}{3}n^2 + 4\frac{3}{8}n - 1\right)$$

$$26) \left(\frac{1}{3}a - 4\frac{1}{2}\right)\left(a^2 - 1\frac{3}{5}a - 2\frac{1}{4}\right)$$

$$27) \left(1\frac{5}{6}k + 4\frac{1}{3}\right)\left(2k^2 - k + 2\frac{2}{3}\right)$$

$$28) \left(\frac{2}{3}x - 1\right)\left(\frac{4}{5}x^2 + 1\frac{2}{5}x + 1\frac{7}{8}\right)$$

$$29) \left(4\frac{5}{7}x - 2\frac{1}{2}\right)\left(\frac{1}{3}x^2 + 2\frac{7}{8}x + 1\frac{5}{6}\right)$$

$$30) \left(1\frac{1}{3}n + 3\frac{5}{8}\right)\left(1\frac{5}{7}n^2 - 3\frac{5}{6}n + 4\frac{1}{3}\right)$$

$$31) \left(1\frac{1}{3}p + 1\frac{3}{5}\right)\left(p^2 - p + 1\frac{5}{6}\right)$$

$$32) \left(\frac{2}{7}m - 1\frac{1}{2}\right)\left(1\frac{7}{8}m^2 + 8\frac{1}{6}m - 1\right)$$

$$33) \left(4\frac{5}{7}x + 1\frac{1}{2}\right)\left(3\frac{5}{7}x^2 - x + 2\right)$$

$$34) \left(1\frac{1}{3}r + 8\right)\left(3\frac{7}{8}r^2 + 3\frac{5}{6}r - 1\frac{4}{5}\right)$$

$$35) \left(6b + 3\frac{2}{3}\right)\left(\frac{3}{4}b^2 - 2\frac{1}{8}b - 2\frac{2}{5}\right)$$

$$36) \left(x + 1\frac{2}{5}\right)\left(1\frac{4}{7}x^2 + 2x - 1\frac{1}{5}\right)$$

$$37) \left(1\frac{1}{4}n + 1\frac{1}{2}\right)\left(1\frac{5}{8}n^2 + \frac{1}{2}n + 2\frac{5}{8}\right)$$

$$38) \left(2n + 1\frac{1}{4}\right)\left(4\frac{1}{2}n^2 + n - \frac{5}{6}\right)$$

$$39) \left(3\frac{1}{3}v - 1\right)\left(v^2 + 4\frac{5}{7}v + 1\frac{1}{5}\right)$$

$$40) \left(x - 1\frac{2}{7}\right)\left(1\frac{1}{8}x^2 - 2\frac{5}{6}x + 3\frac{1}{2}\right)$$

$$41) \left(\frac{6}{7}a - 3\frac{2}{3}\right)\left(\frac{1}{4}a^2 + 1\frac{1}{5}a + 1\frac{1}{2}\right)$$

$$42) \left(\frac{1}{2}x + 2\frac{3}{7}\right)\left(2\frac{1}{2}x^2 - 2\frac{3}{8}x + 1\frac{1}{5}\right)$$

$$43) \left(\frac{5}{7}n + 1\frac{1}{4}\right)\left(1\frac{4}{7}n^2 - \frac{4}{7}n + 3\frac{1}{2}\right)$$

$$44) \left(\frac{5}{8}p + \frac{6}{7}\right)\left(1\frac{2}{7}p^2 - p + \frac{2}{3}\right)$$

$$45) \left(1\frac{3}{4}k + 1\frac{1}{4}\right)\left(2\frac{3}{7}k^2 + 2\frac{7}{8}k - 1\frac{2}{3}\right)$$

$$46) \left(2x - 1\frac{1}{2}\right)\left(\frac{3}{7}x^2 - 3\frac{1}{2}x + 4\frac{1}{6}\right)$$

$$47) \left(\frac{5}{8}n - 1\frac{1}{6}\right)\left(1\frac{2}{3}n^2 - 3\frac{1}{2}n + \frac{1}{2}\right)$$

$$48) \left(7\frac{2}{5}m + 3\frac{1}{2}\right)\left(\frac{5}{6}m^2 + \frac{1}{6}m + \frac{1}{2}\right)$$

$$49) \left(1\frac{1}{2}r - 2\frac{4}{5}\right)\left(1\frac{1}{8}r^2 + 3\frac{1}{6}r + 2\frac{3}{8}\right)$$

$$50) \left(4\frac{3}{5}x + 1\right)\left(2x^2 - 1\frac{1}{4}x + 2\frac{2}{5}\right)$$

$$51) \left(\frac{1}{8}n - \frac{1}{2}\right)\left(n^2 - 2\frac{2}{3}n + 1\right)$$

$$52) \left(4\frac{4}{5}b + 3\frac{1}{2}\right)\left(6b^2 - 1\frac{1}{2}b + 4\frac{1}{5}\right)$$

$$53) \left(v - 1\frac{4}{7}\right)\left(2\frac{5}{6}v^2 + 4\frac{5}{6}v + \frac{1}{2}\right)$$

$$54) \left(x + 1\frac{2}{3}\right)\left(\frac{1}{3}x^2 - 3\frac{1}{8}x - 3\frac{2}{7}\right)$$

$$55) \left(2\frac{3}{8}n - 3\frac{1}{3}\right)\left(\frac{5}{7}n^2 + 1\frac{1}{2}n - 1\frac{1}{8}\right)$$

$$56) \left(8a + \frac{1}{4}\right)\left(\frac{1}{2}a^2 + a + 2\right)$$

$$57) \left(8k + \frac{1}{8}\right)\left(k^2 + 1\frac{1}{5}k - 2\right)$$

$$58) \left(p + \frac{1}{4}\right)\left(\frac{5}{8}p^2 - 2\frac{1}{4}p + 3\right)$$

$$59) \left(1\frac{5}{8}x + 1\right)\left(x^2 + 2\frac{2}{3}x + 2\right)$$

$$60) \left(4\frac{1}{6}n + 1\frac{6}{7}\right)\left(3\frac{2}{5}n^2 + 4\frac{2}{5}n + 4\frac{1}{8}\right)$$

$$61) \left(1\frac{1}{2}m + \frac{3}{5}\right)\left(3\frac{2}{7}m^2 - m - 2\right)$$

$$62) \left(1\frac{2}{5}p - 2\frac{1}{4}\right)\left(5\frac{1}{6}p^2 + p - 4\right)$$

$$63) \left(\frac{2}{3}x - \frac{1}{2}\right)\left(4\frac{2}{3}x^2 + 2\frac{2}{7}x - 2\frac{2}{3}\right)$$

$$64) \left(3\frac{1}{6}n - \frac{1}{7}\right)\left(\frac{1}{6}n^2 - 3\frac{5}{7}n + 5\right)$$

$$65) \left(\frac{2}{3}r - 1\frac{1}{6}\right)\left(2r^2 - \frac{1}{3}r + 1\frac{3}{4}\right)$$

$$66) \left(\frac{1}{2}b + \frac{6}{7}\right)\left(\frac{7}{8}b^2 - \frac{4}{7}b - \frac{4}{7}\right)$$

$$67) \left(6x - 3\frac{1}{2}\right)\left(1\frac{4}{5}x^2 + \frac{1}{2}x + 3\frac{3}{5}\right)$$

$$68) \left(1\frac{1}{2}n + 1\frac{3}{4}\right)\left(5\frac{2}{7}n^2 + \frac{1}{2}n + 4\frac{3}{4}\right)$$

$$69) \left(3\frac{1}{6}v + 3\frac{1}{4}\right)\left(\frac{1}{2}v^2 - 1\frac{1}{4}v - 2\frac{5}{6}\right)$$

$$70) \left(1\frac{1}{3}a + 1\frac{1}{2}\right)\left(4\frac{2}{7}a^2 - 5a - 1\frac{3}{8}\right)$$

$$71) \left(\frac{1}{3}x + 1\frac{1}{4}\right)\left(1\frac{1}{2}x^2 - 3\frac{1}{5}x + \frac{5}{6}\right)$$

$$72) \left(2\frac{1}{6}x + 1\frac{5}{6}\right)\left(\frac{3}{8}x^2 + 1\frac{1}{2}x - 1\frac{1}{4}\right)$$

$$73) \left(3\frac{1}{6}k + 7\frac{2}{7}\right)\left(\frac{5}{6}k^2 + 2k + 1\frac{3}{5}\right)$$

$$74) \left(\frac{2}{3}n + \frac{3}{4}\right)\left(\frac{1}{3}n^2 + 4\frac{2}{5}n + 3\frac{1}{7}\right)$$

$$75) \left(1\frac{1}{7}x - 3\frac{7}{8}\right)\left(2\frac{4}{5}x^2 + 1\frac{2}{5}x + 4\frac{3}{4}\right)$$

$$76) \left(\frac{1}{3}p - 2\frac{3}{7}\right)\left(\frac{1}{2}p^2 - 1\frac{1}{8}p - 6\right)$$

$$77) \left(\frac{2}{3}n + \frac{1}{3}\right)\left(\frac{2}{3}n^2 + 1\frac{3}{8}n - 1\frac{5}{8}\right)$$

$$78) \left(\frac{1}{4}r - 5\right)\left(1\frac{4}{7}r^2 - \frac{1}{2}r - 1\right)$$

$$79) \left(2m + \frac{5}{8}\right)\left(\frac{1}{6}m^2 - 1\frac{1}{8}m + 2\right)$$

$$80) \left(\frac{2}{3}n + \frac{1}{2}\right)\left(n^2 + 2n + 1\frac{1}{4}\right)$$

$$81) \left(2x - 1\frac{1}{3}\right)\left(\frac{1}{4}x^2 + 1\frac{1}{7}x - 1\frac{3}{8}\right)$$

$$82) \left(\frac{1}{8}v + 1\frac{1}{6}\right)\left(4\frac{3}{8}v^2 + 3\frac{2}{3}v - 1\frac{1}{2}\right)$$

$$83) \left(\frac{3}{8}b + 1\frac{7}{8}\right)\left(3\frac{3}{4}b^2 - 1\frac{4}{5}b + 1\right)$$

$$84) \left(4\frac{2}{7}x - \frac{4}{5}\right)\left(1\frac{1}{8}x^2 - 2\frac{1}{6}x + \frac{2}{3}\right)$$

$$85) \left(\frac{1}{4}n + 2\frac{1}{4}\right)\left(1\frac{1}{6}n^2 - 4n + 1\frac{2}{7}\right)$$

$$86) \left(4\frac{3}{4}k - 7\right)\left(k^2 + 2k - \frac{4}{5}\right)$$

$$87) \left(4\frac{5}{8}a - 2\frac{5}{8}\right)\left(\frac{1}{5}a^2 - \frac{2}{3}a + 1\frac{4}{5}\right)$$

$$88) \left(1\frac{6}{7}p - 2\frac{5}{8}\right)\left(4\frac{5}{6}p^2 + \frac{3}{4}p - 2\right)$$

$$89) \left(1\frac{1}{4}x + 1\frac{1}{2}\right)\left(1\frac{1}{3}x^2 + 3x - 4\right)$$

$$90) \left(1\frac{3}{4}n + \frac{1}{2}\right)\left(3\frac{2}{3}n^2 - \frac{2}{3}n + 1\frac{3}{4}\right)$$

$$91) \left(2\frac{1}{4}m - 1\frac{1}{8}\right)\left(3\frac{3}{4}m^2 - 3\frac{2}{7}m + \frac{1}{7}\right)$$

$$92) \left(\frac{3}{8}p - 2\frac{2}{3}\right)\left(3\frac{3}{5}p^2 + 1\frac{5}{6}p + 1\frac{3}{7}\right)$$

$$93) \left(1\frac{2}{5}x + 1\frac{1}{2}\right)\left(x^2 + 1\frac{1}{2}x + 2\right)$$

$$94) \left(\frac{5}{8}n + \frac{1}{5}\right)\left(\frac{2}{5}n^2 - 1\frac{4}{7}n + 1\frac{2}{5}\right)$$

$$95) \left(1\frac{4}{5}b + 3\frac{5}{6}\right)\left(1\frac{5}{6}b^2 + 2\frac{1}{6}b + 1\frac{2}{3}\right)$$

$$96) \left(\frac{3}{8}r + \frac{1}{3}\right)\left(1\frac{1}{4}r^2 + 2r - 6\right)$$

$$97) \left(3\frac{1}{2}n - 2\frac{5}{8}\right)\left(7n^2 + 3\frac{1}{8}n - \frac{1}{7}\right)$$

$$98) \left(1\frac{3}{5}x + 1\frac{1}{4}\right)\left(1\frac{1}{3}x^2 + 3\frac{1}{3}x - \frac{5}{8}\right)$$

$$99) \left(\frac{7}{8}v + 1\frac{7}{8}\right)\left(\frac{2}{3}v^2 - 1\frac{1}{5}v + 3\frac{1}{3}\right)$$

$$100) \left(3\frac{1}{5}a + \frac{3}{5}\right)\left(4\frac{3}{4}a^2 - 2\frac{3}{5}a + 3\frac{1}{3}\right)$$

$$101) \left(1\frac{2}{3}x + 3\frac{5}{8}\right)\left(1\frac{5}{6}x^2 + \frac{1}{4}x + 6\frac{3}{10}\right)$$

$$102) \left(\frac{1}{2}x + 5\frac{1}{12}\right)\left(2x^2 + 3\frac{1}{3}x + 1\frac{5}{7}\right)$$

$$103) \left(1\frac{1}{6}n - 1\frac{6}{11}\right)\left(4\frac{3}{5}n^2 - 2n + \frac{1}{3}\right)$$

$$104) \left(\frac{2}{3}k - 1\frac{3}{10}\right)\left(5\frac{5}{9}k^2 + 4\frac{4}{5}k + 4\frac{1}{8}\right)$$

$$105) \left(2\frac{3}{5}x + 4\frac{8}{11}\right)\left(1\frac{2}{9}x^2 + 6\frac{5}{8}x + \frac{4}{5}\right)$$

$$106) \left(4\frac{4}{9}m - 1\right)\left(5\frac{5}{9}m^2 + 1\frac{5}{11}m - 1\frac{3}{10}\right)$$

$$107) \left(\frac{1}{12}n - 2\right)\left(\frac{3}{5}n^2 + 3\frac{6}{7}n + 1\frac{1}{2}\right)$$

$$108) \left(4\frac{4}{9}p + 5\frac{7}{10}\right)\left(1\frac{1}{6}p^2 - \frac{5}{6}p - 2\frac{1}{4}\right)$$

$$109) \left(1\frac{1}{4}r - 2\right)\left(\frac{1}{3}r^2 + 1\frac{1}{2}r + 1\frac{1}{4}\right)$$

$$110) \left(\frac{7}{11}x - 1\frac{2}{3}\right)\left(5\frac{3}{5}x^2 + 11x - 3\frac{9}{10}\right)$$

$$111) \left(3\frac{3}{8}n + 6\frac{3}{4}\right)\left(1\frac{8}{11}n^2 + \frac{5}{12}n - \frac{2}{3}\right)$$

$$112) \left(2b + \frac{7}{10}\right)\left(\frac{1}{10}b^2 + 1\frac{1}{8}b + 5\frac{3}{8}\right)$$

$$113) \left(5\frac{7}{10}v - 1\right)\left(2\frac{5}{12}v^2 + 1\frac{4}{5}v - 3\frac{11}{12}\right)$$

$$114) \left(\frac{5}{7}x + \frac{3}{7}\right)\left(1\frac{1}{2}x^2 + 8x + \frac{1}{2}\right)$$

$$115) \left(1\frac{2}{5}n + \frac{3}{4}\right)\left(\frac{5}{12}n^2 + 4\frac{2}{9}n - 1\frac{2}{7}\right)$$

$$116) \left(3\frac{1}{9}a + 3\frac{7}{8}\right)\left(\frac{1}{3}a^2 + 1\frac{2}{3}a - 2\frac{1}{2}\right)$$

$$117) \left(1\frac{5}{6}k - 2\right)\left(\frac{1}{5}k^2 - 2k - \frac{5}{12}\right)$$

$$118) \left(2\frac{1}{2}p + 2\frac{5}{9}\right)\left(6\frac{8}{11}p^2 + \frac{1}{4}p + 1\frac{7}{11}\right)$$

$$119) \left(1\frac{1}{3}x - 3\frac{1}{12}\right)\left(12x^2 + \frac{1}{10}x + 1\right)$$

$$120) \left(2\frac{5}{12}m + 1\right)\left(1\frac{2}{3}m^2 - \frac{4}{9}m + 1\frac{2}{9}\right)$$

$$121) \left(\frac{3}{5}n + 1\frac{3}{11}\right)\left(1\frac{1}{10}n^2 + 1\frac{1}{3}n - 1\right)$$

$$122) \left(2r + \frac{1}{7}\right)\left(r^2 + 3\frac{1}{2}r - 4\right)$$

$$123) \left(6\frac{1}{4}x + 1\right)\left(\frac{4}{7}x^2 + x - 2\frac{5}{8}\right)$$

$$124) \left(\frac{6}{7}b + 4\frac{1}{4}\right)\left(2b^2 - 1\frac{2}{3}b - 1\right)$$

$$125) \left(2r - 1\frac{1}{2}\right)\left(1\frac{1}{2}r^2 + 6\frac{5}{7}r - 1\frac{3}{10}\right)$$

$$126) \left(1\frac{8}{11}n + 1\frac{1}{4}\right)\left(4\frac{3}{10}n^2 - 1\frac{3}{10}n + 6\frac{4}{5}\right)$$

$$127) \left(\frac{1}{2}x - 1\frac{4}{11}\right)\left(5\frac{1}{6}x^2 - 12x + \frac{3}{4}\right)$$

$$128) \left(5\frac{1}{6}n + 1\frac{1}{3}\right)\left(6\frac{11}{12}n^2 + 6\frac{2}{11}n - 3\frac{2}{3}\right)$$

$$129) \left(a - 1\frac{2}{3}\right)\left(2\frac{5}{6}a^2 - 3\frac{7}{12}a - 2\right)$$

$$130) \left(2\frac{7}{10}v - 1\frac{1}{3}\right)\left(1\frac{2}{3}v^2 + 6\frac{1}{6}v + 5\frac{1}{4}\right)$$

$$131) \left(x + \frac{5}{6}\right)\left(4\frac{1}{8}x^2 + 5\frac{8}{11}x - 3\frac{3}{8}\right)$$

$$132) \left(1\frac{4}{9}n - \frac{2}{3}\right)\left(5\frac{1}{2}n^2 + \frac{9}{10}n - 1\frac{1}{3}\right)$$

$$133) \left(\frac{1}{5}k + 4\frac{1}{2}\right)\left(3\frac{1}{7}k^2 - k - 2\frac{1}{2}\right)$$

$$134) \left(3\frac{5}{12}x + \frac{5}{8}\right)\left(6\frac{3}{11}x^2 + 2x + 5\frac{1}{2}\right)$$

$$135) \left(\frac{1}{2}x + \frac{7}{10}\right)\left(\frac{1}{3}x^2 - 1\frac{10}{11}x - 2\frac{3}{10}\right)$$

$$136) \left(2\frac{6}{11}p + 1\frac{8}{11}\right)\left(\frac{3}{8}p^2 + \frac{1}{3}p - 1\frac{2}{3}\right)$$

$$137) \left(7m - \frac{4}{5}\right)\left(3\frac{5}{8}m^2 - m + \frac{1}{2}\right)$$

$$138) \left(4\frac{3}{4}n + 2\frac{5}{12}\right)\left(4\frac{1}{7}n^2 + 1\frac{1}{2}n + 1\frac{1}{2}\right)$$

$$139) \left(7r + 1\frac{7}{10}\right)\left(1\frac{2}{3}r^2 + 6\frac{1}{2}r + 5\frac{1}{10}\right)$$

$$140) \left(12\frac{1}{2}v + 4\frac{3}{4}\right)\left(1\frac{1}{3}v^2 + 1\frac{1}{3}v - 2\frac{1}{4}\right)$$

$$141) \left(\frac{2}{5}b - 9\right)\left(1\frac{3}{10}b^2 + \frac{3}{4}b - 2\frac{1}{8}\right)$$

$$142) \left(3\frac{2}{3}x + 1\frac{1}{2}\right)\left(3\frac{1}{11}x^2 - \frac{1}{6}x + 1\frac{2}{7}\right)$$

$$143) \left(1\frac{7}{10}n - 3\frac{3}{4}\right)\left(n^2 + \frac{1}{12}n + 1\frac{7}{10}\right)$$

$$144) \left(1\frac{8}{9}x + 3\frac{3}{10}\right)\left(1\frac{1}{12}x^2 + 4\frac{11}{12}x + 2\frac{8}{9}\right)$$

$$145) \left(3\frac{3}{5}n + 4\frac{7}{8}\right)\left(2\frac{1}{12}n^2 + n + 4\frac{1}{2}\right)$$

$$146) \left(5\frac{1}{8}k - 1\frac{3}{8}\right)\left(4\frac{4}{9}k^2 + 7k + 4\frac{1}{6}\right)$$

$$147) \left(1\frac{5}{6}a - 1\frac{4}{7}\right)\left(3\frac{3}{7}a^2 + 5\frac{4}{5}a + 5\frac{8}{9}\right)$$

$$148) \left(2\frac{1}{4}p - \frac{2}{7}\right)\left(2\frac{4}{9}p^2 + 2\frac{2}{7}p - 2\frac{5}{9}\right)$$

$$149) \left(12x - 3\frac{2}{5}\right)\left(3\frac{1}{10}x^2 + 4\frac{1}{10}x + 1\frac{5}{7}\right)$$

$$150) \left(1\frac{3}{11}n - \frac{5}{7}\right)\left(\frac{3}{8}n^2 + \frac{2}{5}n + 1\right)$$

$$151) \left(1\frac{2}{3}m - 2\frac{11}{12}\right)\left(5\frac{4}{9}m^2 + 3\frac{7}{10}m + 1\frac{2}{3}\right)$$

$$152) \left(6\frac{5}{11}r + \frac{1}{2}\right)\left(\frac{9}{11}r^2 - 1\frac{7}{8}r - 1\frac{1}{3}\right)$$

$$153) \left(n + 4\frac{5}{7}\right)\left(\frac{1}{7}n^2 + n + 3\frac{5}{12}\right)$$

$$154) \left(2x + 1\frac{4}{9}\right)\left(6\frac{3}{7}x^2 + 3\frac{7}{10}x - 3\frac{3}{4}\right)$$

$$155) \left(1\frac{3}{10}b - \frac{2}{3}\right)\left(\frac{2}{7}b^2 - 3\frac{5}{9}b - 1\frac{1}{5}\right)$$

$$156) \left(\frac{2}{3}r + 1\frac{1}{2}\right)\left(r^2 + 2\frac{7}{8}r + \frac{2}{5}\right)$$

$$157) \left(1\frac{5}{8}n + 1\frac{1}{2}\right)\left(6\frac{1}{7}n^2 + \frac{1}{3}n - 1\frac{4}{5}\right)$$

$$158) \left(5\frac{1}{12}x - 3\frac{4}{7}\right)\left(1\frac{1}{2}x^2 + 1\frac{3}{8}x + 3\right)$$

$$159) \left(2\frac{3}{5}a + 6\frac{5}{7}\right)\left(\frac{2}{5}a^2 + 4\frac{1}{4}a + 6\frac{5}{6}\right)$$

$$160) \left(\frac{1}{8}v + \frac{1}{2}\right)\left(5\frac{7}{8}v^2 + 2\frac{1}{5}v - \frac{5}{12}\right)$$

$$161) \left(1\frac{5}{7}x + 9\right)\left(2x^2 + 1\frac{7}{9}x - 1\frac{1}{6}\right)$$

$$162) \left(\frac{8}{11}n + 3\frac{5}{7}\right)\left(1\frac{3}{10}n^2 + 5\frac{6}{7}n - 1\frac{1}{4}\right)$$

$$163) \left(3\frac{4}{7}k + \frac{1}{5}\right)\left(k^2 - 3\frac{5}{8}k - 5\right)$$

$$164) \left(1\frac{3}{4}x - 3\frac{1}{9}\right)\left(2x^2 + 5\frac{3}{4}x - 1\frac{3}{5}\right)$$

$$165) \left(p - 1\frac{1}{3}\right)\left(1\frac{5}{8}p^2 + 1\frac{5}{9}p - \frac{1}{2}\right)$$

$$166) \left(4\frac{9}{10}x - 1\frac{1}{3}\right)\left(\frac{7}{8}x^2 + \frac{7}{9}x + \frac{7}{11}\right)$$

$$167) \left(3\frac{5}{6}n + 4\frac{5}{8}\right)\left(\frac{7}{11}n^2 - 2n + \frac{1}{2}\right)$$

$$168) \left(3\frac{1}{9}r + 1\frac{1}{3}\right)\left(1\frac{3}{5}r^2 - 2\frac{2}{11}r + 4\frac{6}{11}\right)$$

$$169) \left(8n + \frac{2}{3}\right)\left(6\frac{1}{11}n^2 + 10n - 1\frac{3}{5}\right)$$

$$170) \left(\frac{2}{3}m - 1\frac{9}{10}\right)\left(1\frac{1}{8}m^2 - \frac{1}{5}m + 1\frac{2}{3}\right)$$

$$171) \left(1\frac{3}{5}x - 2\frac{1}{8}\right)\left(\frac{7}{8}x^2 - \frac{11}{12}x - \frac{1}{6}\right)$$

$$172) \left(4\frac{8}{11}x - \frac{1}{7}\right)\left(2\frac{3}{8}x^2 - 12x - 1\frac{1}{2}\right)$$

$$173) \left(1\frac{2}{3}b + 1\frac{3}{5}\right)\left(1\frac{1}{8}b^2 + 4\frac{1}{6}b + 2\frac{1}{2}\right)$$

$$174) \left(\frac{3}{4}v + 2\frac{3}{4}\right)\left(9v^2 - \frac{3}{4}v + 1\frac{4}{7}\right)$$

$$175) \left(\frac{5}{8}a - 1\frac{2}{5}\right)\left(1\frac{1}{3}a^2 + 1\frac{4}{9}a + 2\frac{3}{4}\right)$$

$$176) \left(2n + 1\frac{11}{12}\right)\left(3\frac{3}{8}n^2 + 1\frac{1}{5}n + 6\frac{5}{6}\right)$$

$$177) \left(3\frac{1}{10}k + 5\frac{1}{9}\right)\left(4\frac{4}{7}k^2 + 1\frac{1}{2}k + 4\frac{1}{2}\right)$$

$$178) \left(5\frac{1}{3}x + \frac{3}{5}\right)\left(\frac{1}{12}x^2 + \frac{3}{8}x - 1\frac{1}{2}\right)$$

$$179) \left(\frac{1}{3}n + 2\right)\left(1\frac{7}{10}n^2 + 3\frac{3}{4}n - 1\frac{1}{3}\right)$$

$$180) \left(\frac{2}{7}p + 1\frac{7}{10}\right)\left(1\frac{3}{5}p^2 - 1\frac{7}{12}p + 1\frac{1}{4}\right)$$

$$181) \left(\frac{1}{6}m - 3\frac{7}{12}\right)\left(\frac{1}{2}m^2 + \frac{7}{12}m - 3\frac{8}{9}\right)$$

$$182) \left(\frac{1}{6}b - 1\frac{2}{9}\right)\left(\frac{7}{9}b^2 + 5\frac{4}{7}b - \frac{5}{6}\right)$$

$$183) \left(1\frac{2}{3}x + 1\frac{5}{12}\right)\left(\frac{1}{2}x^2 - 1\frac{1}{4}x - 1\frac{1}{5}\right)$$

$$184) \left(4\frac{1}{2}r + 1\frac{1}{3}\right)\left(6\frac{4}{11}r^2 + \frac{9}{11}r + \frac{1}{2}\right)$$

$$185) \left(6\frac{4}{5}n + \frac{1}{4}\right)\left(\frac{1}{2}n^2 + 1\frac{11}{12}n - \frac{5}{9}\right)$$

$$186) \left(1\frac{2}{5}x + 1\frac{2}{7}\right)\left(4\frac{1}{2}x^2 + 6\frac{1}{4}x + \frac{2}{3}\right)$$

$$187) \left(6\frac{3}{7}a + 1\frac{5}{8}\right)\left(\frac{4}{7}a^2 - 7a - \frac{2}{3}\right)$$

$$188) \left(1\frac{7}{11}n - 1\frac{4}{5}\right)\left(1\frac{7}{9}n^2 - 3\frac{1}{4}n + 1\frac{5}{8}\right)$$

$$189) \left(1\frac{3}{8}v + 2\frac{3}{5}\right)\left(1\frac{5}{9}v^2 + 1\frac{3}{5}v - 2\right)$$

$$190) \left(\frac{1}{3}v + 1\frac{1}{2}\right)\left(6\frac{5}{12}v^2 + 1\frac{2}{3}v + 1\frac{5}{8}\right)$$

$$191) \left(\frac{1}{2}n - \frac{1}{3}\right)\left(1\frac{3}{8}n^2 + 5\frac{3}{8}n + 2\right)$$

$$192) \left(3\frac{7}{10}x - \frac{1}{11}\right)\left(\frac{7}{9}x^2 + 5\frac{1}{2}x - 1\frac{1}{9}\right)$$

$$193) \left(1\frac{1}{3}x - \frac{6}{11}\right)\left(4\frac{8}{9}x^2 + 5\frac{5}{7}x - 2\frac{1}{2}\right)$$

$$194) \left(\frac{7}{10}k + 1\frac{1}{11}\right)\left(\frac{3}{10}k^2 - 1\frac{5}{7}k - 2\frac{1}{6}\right)$$

$$195) \left(3\frac{5}{12}x + 4\frac{7}{8}\right)\left(\frac{8}{11}x^2 + 6\frac{1}{4}x - 1\frac{3}{5}\right)$$

$$196) \left(1\frac{3}{5}p + 1\right)\left(4\frac{4}{9}p^2 - 1\frac{9}{10}p + 1\frac{1}{7}\right)$$

$$197) \left(\frac{1}{9}n - \frac{3}{4}\right)\left(1\frac{1}{9}n^2 + 2\frac{9}{11}n + 1\right)$$

$$198) \left(3\frac{4}{5}m - 10\right)\left(1\frac{3}{5}m^2 - 2\frac{1}{12}m - 3\frac{2}{9}\right)$$

$$199) \left(1\frac{5}{11}r - 5\right)\left(4\frac{3}{4}r^2 - 1\frac{1}{2}r - 2\frac{4}{9}\right)$$

$$200) \left(1\frac{1}{8}x - 2\frac{3}{10}\right)\left(\frac{2}{5}x^2 + 2\frac{1}{3}x - 3\frac{2}{3}\right)$$

$$201) \left(\frac{7}{10}b + \frac{10}{11}\right)\left(1\frac{11}{13}b^2 + \frac{3}{7}b + \frac{1}{20}\right)$$

$$202) \left(2\frac{1}{4}n + 10\frac{7}{16}\right)\left(7\frac{1}{4}n^2 + 3\frac{1}{11}n + 2\frac{5}{6}\right)$$

$$203) \left(\frac{3}{8}x - 1\frac{5}{8}\right)\left(\frac{1}{6}x^2 + 8\frac{2}{3}x - \frac{7}{8}\right)$$

$$204) \left(\frac{1}{11}v + 1\frac{12}{13}\right)\left(4\frac{3}{11}v^2 + 6\frac{3}{11}v + \frac{17}{20}\right)$$

$$205) \left(6\frac{2}{5}n + 17\frac{1}{10}\right)\left(1\frac{5}{13}n^2 + 2n - 3\frac{7}{10}\right)$$

$$206) \left(10\frac{4}{15}a - 1\right)\left(6\frac{9}{10}a^2 - \frac{4}{7}a + 3\frac{9}{10}\right)$$

$$207) \left(10\frac{5}{9}p + 5\frac{1}{7}\right)\left(1\frac{3}{19}p^2 + 2\frac{5}{7}p + \frac{1}{12}\right)$$

$$208) \left(9\frac{5}{6}x + 2\frac{13}{15}\right)\left(9\frac{6}{17}x^2 - 2\frac{1}{2}x + 1\frac{1}{2}\right)$$

$$209) \left(1\frac{7}{12}k - 11\right)\left(1\frac{3}{5}k^2 - 3\frac{1}{14}k + 4\frac{1}{7}\right)$$

$$210) \left(9\frac{7}{16}n - \frac{3}{4}\right)\left(10\frac{10}{13}n^2 + 2\frac{3}{8}n + 5\frac{9}{20}\right)$$

$$211) \left(1\frac{12}{13}m - \frac{7}{11}\right)\left(11m^2 - 1\frac{1}{8}m - 2\right)$$

$$212) \left(1\frac{3}{5}r + 1\frac{9}{10}\right)\left(8\frac{12}{17}r^2 - 1\frac{1}{9}r + 1\right)$$

$$213) \left(2\frac{7}{8}x + 9\frac{1}{11}\right)\left(5\frac{7}{8}x^2 + \frac{2}{3}x + 4\frac{1}{2}\right)$$

$$214) \left(1\frac{13}{14}b - 1\frac{1}{6}\right)\left(1\frac{13}{16}b^2 + 6\frac{1}{4}b - 2\right)$$

$$215) \left(9\frac{1}{12}v + \frac{1}{4}\right)\left(2\frac{5}{7}v^2 + 2v - 2\frac{9}{17}\right)$$

$$216) \left(\frac{5}{17}n + 1\right)\left(4\frac{9}{10}n^2 - n + 1\frac{3}{8}\right)$$

$$217) \left(\frac{1}{9}x - \frac{1}{4}\right)\left(1\frac{2}{9}x^2 - 2\frac{3}{5}x - 1\frac{2}{3}\right)$$

$$218) \left(6\frac{13}{18}n - 1\frac{2}{3}\right)\left(4\frac{3}{14}n^2 + 10\frac{11}{14}n + 2\frac{1}{2}\right)$$

$$219) \left(\frac{1}{8}a + 3\frac{1}{20}\right)\left(\frac{3}{14}a^2 + 8\frac{1}{10}a + 1\frac{10}{11}\right)$$

$$220) \left(4\frac{1}{3}x + 6\frac{13}{20}\right)\left(9\frac{5}{8}x^2 + 19\frac{1}{13}x + \frac{2}{3}\right)$$

$$221) \left(4\frac{12}{13}v + 1\frac{2}{3}\right)\left(2v^2 + 1\frac{4}{7}v - 1\frac{4}{9}\right)$$

$$222) \left(\frac{9}{20}x + 4\frac{1}{9}\right)\left(5\frac{3}{4}x^2 + 10\frac{7}{18}x - 1\frac{4}{15}\right)$$

$$223) \left(2\frac{12}{17}n + 1\frac{4}{5}\right)\left(4n^2 + 8\frac{1}{2}n - \frac{9}{13}\right)$$

$$224) \left(1\frac{1}{7}x + \frac{12}{13}\right)\left(4\frac{8}{15}x^2 - x - 3\frac{1}{16}\right)$$

$$225) \left(10\frac{1}{4}p + 10\frac{3}{7}\right)\left(1\frac{1}{8}p^2 + 1\frac{9}{20}p + \frac{1}{3}\right)$$

$$226) \left(1\frac{1}{14}k - \frac{4}{7}\right)\left(\frac{5}{13}k^2 - k - 1\frac{3}{20}\right)$$

$$227) \left(\frac{13}{18}n + \frac{1}{16}\right)\left(1\frac{5}{12}n^2 - \frac{1}{2}n + 1\right)$$

$$228) \left(2r + 5\frac{8}{19}\right)\left(\frac{9}{13}r^2 - 2\frac{13}{18}r - 2\frac{15}{17}\right)$$

$$229) \left(\frac{7}{15}m + 4\frac{3}{5}\right)\left(\frac{4}{13}m^2 + 8\frac{5}{7}m + 8\frac{3}{7}\right)$$

$$230) \left(\frac{2}{3}x - 1\frac{1}{2}\right)\left(1\frac{4}{11}x^2 + \frac{1}{2}x + 2\frac{4}{5}\right)$$

$$231) \left(13n + 3\frac{7}{16}\right)\left(2\frac{5}{12}n^2 + 6\frac{1}{5}n - 1\frac{7}{9}\right)$$

$$232) \left(10\frac{11}{17}b + 3\frac{1}{18}\right)\left(\frac{7}{18}b^2 + \frac{8}{19}b - 2\frac{9}{14}\right)$$

$$233) \left(\frac{2}{7}v + 1\frac{3}{7}\right)\left(7\frac{2}{17}v^2 + 1\frac{7}{10}v + 8\frac{11}{18}\right)$$

$$234) \left(2x + 1\frac{1}{3}\right)\left(16x^2 + 1\frac{1}{6}x + 1\frac{11}{12}\right)$$

$$235) \left(8\frac{1}{2}x - 14\right)\left(1\frac{3}{4}x^2 - \frac{1}{5}x - 1\frac{6}{11}\right)$$

$$236) \left(1\frac{5}{6}p + 4\frac{11}{20}\right)\left(1\frac{3}{17}p^2 + 10\frac{9}{10}p + 1\frac{2}{3}\right)$$

$$237) \left(7\frac{1}{8}k + 4\frac{1}{12}\right)\left(1\frac{1}{2}k^2 + 1\frac{7}{15}k + 10\frac{1}{2}\right)$$

$$238) \left(a + 6\frac{1}{3}\right)\left(\frac{1}{8}a^2 + \frac{2}{13}a + 6\right)$$

$$239) \left(6\frac{1}{3}x - 1\right)\left(x^2 + 1\frac{9}{13}x + \frac{9}{10}\right)$$

$$240) \left(9\frac{7}{12}n + 9\frac{4}{15}\right)\left(1\frac{9}{14}n^2 + 10\frac{7}{8}n + 8\frac{5}{12}\right)$$

$$241) \left(4r + 3\frac{2}{3}\right)\left(16\frac{5}{17}r^2 + 12r + \frac{1}{2}\right)$$

$$242) \left(2x + 7\frac{1}{14}\right)\left(6\frac{5}{9}x^2 + 4\frac{7}{18}x + \frac{1}{4}\right)$$

$$243) \left(\frac{4}{9}m + 1\frac{1}{4}\right)\left(2m^2 - 3\frac{2}{15}m + \frac{13}{15}\right)$$

$$244) \left(4\frac{10}{13}n + 8\frac{5}{16}\right)\left(3\frac{1}{2}n^2 + 1\frac{3}{5}n - \frac{1}{3}\right)$$

$$245) \left(1\frac{6}{11}b - 19\right)\left(\frac{2}{3}b^2 + 4\frac{7}{12}b + 10\frac{11}{12}\right)$$

$$246) \left(2\frac{2}{5}x + 4\frac{1}{2}\right)\left(5x^2 - 2\frac{1}{2}x - 1\frac{1}{6}\right)$$

$$247) \left(1\frac{7}{8}v + 1\frac{1}{3}\right)\left(\frac{12}{13}v^2 + \frac{2}{11}v - \frac{3}{5}\right)$$

$$248) \left(\frac{4}{15}n + 10\frac{17}{19}\right)\left(1\frac{1}{7}n^2 + 5\frac{2}{5}n - \frac{7}{18}\right)$$

$$249) \left(1\frac{11}{12}a + 1\frac{11}{18}\right)\left(9\frac{4}{11}a^2 - 2\frac{3}{4}a + 3\frac{7}{9}\right)$$

$$250) \left(2\frac{2}{9}k + \frac{1}{6}\right)\left(\frac{1}{2}k^2 + 2k + 1\frac{12}{13}\right)$$

$$251) \left(\frac{4}{7}x + 1\frac{2}{5}\right)\left(5\frac{1}{6}x^2 - 1\frac{1}{4}x - 3\frac{9}{10}\right)$$

$$252) \left(15n - \frac{1}{3}\right)\left(10\frac{1}{3}n^2 - n - \frac{9}{13}\right)$$

$$253) \left(10\frac{6}{11}k - \frac{4}{5}\right)\left(\frac{3}{4}k^2 - 2k + 1\frac{3}{4}\right)$$

$$254) \left(1\frac{5}{16}x - 20\frac{11}{15}\right)\left(1\frac{6}{19}x^2 - x + 6\frac{5}{18}\right)$$

$$255) \left(3\frac{1}{20}p - 1\frac{10}{11}\right)\left(8\frac{2}{3}p^2 + 8\frac{3}{7}p + \frac{2}{7}\right)$$

$$256) \left(1\frac{8}{17}x - 1\frac{1}{2}\right)\left(1\frac{11}{17}x^2 - 1\frac{7}{13}x - 1\right)$$

$$257) \left(1\frac{5}{6}m + \frac{7}{18}\right)\left(5\frac{2}{15}m^2 + \frac{5}{13}m - \frac{7}{11}\right)$$

$$258) \left(5\frac{1}{2}r + 1\frac{1}{18}\right)\left(3\frac{7}{8}r^2 + 10\frac{4}{7}r + \frac{2}{5}\right)$$

$$259) \left(8\frac{4}{15}n - 3\frac{3}{20}\right)\left(3\frac{9}{10}n^2 + n - 13\right)$$

$$260) \left(\frac{1}{6}x - 1\frac{13}{16}\right)\left(17\frac{2}{3}x^2 + 5\frac{1}{15}x + \frac{1}{7}\right)$$

$$261) \left(1\frac{7}{8}n + 1\frac{1}{15}\right)\left(1\frac{8}{9}n^2 + \frac{4}{9}n + 3\frac{9}{16}\right)$$

$$262) \left(7\frac{4}{13}b + \frac{2}{5}\right)\left(9\frac{6}{7}b^2 + 2\frac{5}{18}b + \frac{10}{11}\right)$$

$$263) \left(16v + 6\frac{11}{19}\right)\left(\frac{1}{6}v^2 - \frac{5}{6}v - 4\frac{2}{7}\right)$$

$$264) \left(10\frac{1}{2}x - \frac{3}{11}\right)\left(5\frac{17}{18}x^2 + 1\frac{15}{17}x + 6\frac{7}{9}\right)$$

$$265) \left(5\frac{1}{14}a + 1\frac{3}{10}\right)\left(16a^2 + 1\frac{2}{7}a + 1\frac{1}{3}\right)$$

$$266) \left(1\frac{9}{17}x + \frac{8}{9}\right)\left(\frac{3}{5}x^2 - 1\frac{2}{5}x - 14\right)$$

$$267) \left(4\frac{1}{5}k + 10\frac{5}{18}\right)\left(7\frac{15}{19}k^2 + 2k + 2\frac{4}{5}\right)$$

$$268) \left(2p - 3\frac{13}{18}\right)\left(1\frac{7}{13}p^2 + \frac{11}{13}p + 1\frac{1}{16}\right)$$

$$269) \left(2\frac{13}{18}x - 1\frac{1}{12}\right)\left(\frac{2}{5}x^2 - \frac{4}{19}x + 9\frac{2}{19}\right)$$

$$270) \left(\frac{1}{3}n - 2\right)\left(\frac{3}{7}n^2 + 6\frac{1}{2}n + 7\frac{4}{15}\right)$$

$$271) \left(\frac{5}{6}m + \frac{9}{20}\right)\left(5\frac{1}{8}m^2 - 1\frac{1}{2}m - \frac{7}{10}\right)$$

$$272) \left(\frac{1}{4}x - 1\frac{6}{11}\right)\left(1\frac{1}{6}x^2 + 9\frac{1}{2}x + 2\right)$$

$$273) \left(7\frac{1}{10}n + 1\frac{11}{18}\right)\left(1\frac{3}{7}n^2 + 10\frac{13}{14}n + 1\right)$$

$$274) \left(\frac{6}{7}b + 6\frac{7}{9}\right)\left(\frac{10}{11}b^2 - 1\frac{3}{8}b - 1\frac{3}{4}\right)$$

$$275) \left(1\frac{1}{3}r + 1\frac{1}{13}\right)\left(6\frac{4}{7}r^2 - 1\frac{1}{6}r - 7\right)$$

$$276) \left(10\frac{10}{11}n + 4\frac{1}{16}\right)\left(8\frac{5}{16}n^2 + 6\frac{8}{9}n - \frac{5}{6}\right)$$

$$277) \left(\frac{3}{4}v + \frac{5}{19}\right)\left(9\frac{9}{11}v^2 + \frac{10}{19}v + 8\frac{2}{9}\right)$$

$$278) \left(1\frac{1}{2}x + 1\right)\left(3\frac{7}{11}x^2 + \frac{3}{4}x + \frac{1}{2}\right)$$

$$279) \left(7\frac{1}{8}a - 4\frac{3}{4}\right)\left(\frac{3}{7}a^2 - 1\frac{3}{5}a + 4\frac{2}{3}\right)$$

$$280) \left(\frac{1}{2}k + 1\frac{3}{7}\right)\left(\frac{4}{5}k^2 - 1\frac{4}{5}k + 6\frac{9}{13}\right)$$

$$281) \left(9\frac{1}{3}x + 3\frac{4}{13}\right)\left(1\frac{1}{3}x^2 - \frac{3}{4}x + \frac{15}{16}\right)$$

$$282) \left(9\frac{11}{12}x + \frac{1}{2}\right)\left(\frac{1}{2}x^2 + 6\frac{10}{13}x + 7\frac{2}{19}\right)$$

$$283) \left(\frac{7}{10}n + 5\right)\left(\frac{1}{2}n^2 - 1\frac{9}{10}n - 2\frac{4}{5}\right)$$

$$284) \left(k + 1\frac{2}{9}\right)\left(1\frac{13}{15}k^2 - \frac{1}{10}k + 3\frac{1}{4}\right)$$

$$285) \left(18p - \frac{10}{11}\right)\left(2\frac{1}{20}p^2 - \frac{3}{4}p + 5\frac{6}{17}\right)$$

$$286) \left(5\frac{11}{14}x - 2\right)\left(20x^2 - 1\frac{4}{15}x - 1\frac{4}{13}\right)$$

$$287) \left(\frac{7}{11}n - \frac{2}{5}\right)\left(\frac{2}{7}n^2 + 1\frac{1}{2}n + 7\frac{8}{9}\right)$$

$$288) \left(6\frac{5}{8}m + 4\frac{17}{20}\right)\left(1\frac{8}{13}m^2 - 1\frac{4}{5}m + 7\frac{7}{10}\right)$$

$$289) \left(5\frac{1}{18}r + 1\frac{12}{13}\right)\left(1\frac{5}{6}r^2 + 7\frac{1}{8}r - \frac{19}{20}\right)$$

$$290) \left(\frac{1}{5}x - 1\frac{1}{14}\right)\left(6\frac{5}{13}x^2 - \frac{7}{10}x - 1\frac{8}{15}\right)$$

$$291) \left(4\frac{5}{12}n + 4\frac{1}{3}\right)\left(9n^2 + 20n - 1\frac{17}{18}\right)$$

$$292) \left(4\frac{14}{19}v + 1\frac{12}{19}\right)\left(1\frac{2}{3}v^2 + 7\frac{2}{3}v - \frac{8}{15}\right)$$

$$293) \left(1\frac{5}{9}b - 3\frac{7}{11}\right)\left(7\frac{11}{12}b^2 + 2\frac{5}{13}b + 9\frac{13}{18}\right)$$

$$294) \left(1\frac{11}{16}x - \frac{8}{9}\right)\left(\frac{6}{19}x^2 - 3\frac{11}{12}x + 6\frac{1}{16}\right)$$

$$295) \left(1\frac{4}{13}x + 1\frac{3}{7}\right)\left(\frac{10}{11}x^2 + 10\frac{8}{19}x + \frac{1}{5}\right)$$

$$296) \left(2\frac{4}{11}a + 1\right)\left(10\frac{1}{10}a^2 + 6\frac{12}{19}a - 3\frac{6}{19}\right)$$

$$297) \left(\frac{19}{20}k - 1\frac{2}{5}\right)\left(\frac{6}{13}k^2 - 1\frac{3}{5}k - 1\frac{5}{9}\right)$$

$$298) \left(1\frac{5}{17}p - 2\frac{10}{13}\right)\left(\frac{7}{9}p^2 + 8\frac{6}{19}p + \frac{1}{14}\right)$$

$$299) \left(1\frac{1}{3}x - \frac{1}{2}\right) \left(10\frac{3}{11}x^2 + \frac{1}{2}x - 3\frac{3}{13}\right)$$

$$300) \left(4\frac{11}{12}n + 7\frac{5}{6}\right) \left(1\frac{11}{12}n^2 + \frac{7}{16}n - 20\frac{3}{11}\right)$$

$$301) \left(10\frac{10}{21}x + 2\right) \left(6\frac{1}{7}x^2 + 7\frac{11}{28}x - 1\frac{28}{31}\right)$$

$$302) \left(1\frac{3}{4}r + 15\frac{32}{41}\right) \left(26r^2 + 6\frac{11}{27}r - 2\frac{3}{4}\right)$$

$$303) \left(7\frac{23}{35}m + 2\frac{22}{37}\right) \left(1\frac{1}{2}m^2 + 21\frac{1}{6}m + 1\frac{17}{24}\right)$$

$$304) \left(1\frac{4}{5}n + 1\frac{17}{18}\right) \left(20\frac{5}{8}n^2 + 21\frac{30}{47}n + 4\frac{18}{31}\right)$$

$$305) \left(20\frac{19}{43}b + 6\frac{1}{30}\right) \left(5\frac{31}{39}b^2 + \frac{6}{11}b + 1\frac{12}{23}\right)$$

$$306) \left(\frac{3}{7}x + \frac{4}{7}\right) \left(1\frac{9}{10}x^2 - \frac{1}{7}x + \frac{1}{7}\right)$$

$$307) \left(1\frac{3}{11}v - \frac{26}{43}\right) \left(\frac{7}{11}v^2 - 21v - \frac{14}{15}\right)$$

$$308) \left(19\frac{1}{33}n + 7\frac{15}{16}\right) \left(19\frac{18}{35}n^2 + 15\frac{13}{36}n + 1\frac{3}{16}\right)$$

$$309) \left(1\frac{31}{50}a - \frac{3}{4}\right) \left(\frac{1}{9}a^2 + 1\frac{9}{17}a + 1\frac{15}{23}\right)$$

$$310) \left(1\frac{18}{35}x + 14\frac{1}{45}\right) \left(9\frac{3}{10}x^2 + 1\frac{24}{29}x - 3\frac{15}{46}\right)$$

$$311) \left(9\frac{7}{18}k + \frac{7}{48}\right) \left(1\frac{31}{48}k^2 + 2k + 1\frac{3}{4}\right)$$

$$312) \left(20\frac{7}{40}x + \frac{1}{2}\right) \left(24\frac{18}{29}x^2 - 2\frac{13}{14}x + 2\frac{21}{44}\right)$$

$$313) \left(2\frac{3}{8}n + 1\frac{7}{11}\right) \left(\frac{22}{43}n^2 + \frac{6}{7}n - \frac{7}{8}\right)$$

$$314) \left(15\frac{31}{43}p + 1\frac{7}{18}\right) \left(11\frac{7}{44}p^2 - \frac{4}{21}p + 1\frac{3}{5}\right)$$

$$315) \left(7\frac{21}{47}x - \frac{21}{22}\right) \left(\frac{13}{14}x^2 + x + \frac{1}{3}\right)$$

$$316) \left(\frac{18}{25}m + 9\frac{13}{34}\right) \left(m^2 - \frac{35}{39}m + 7\frac{23}{45}\right)$$

$$317) \left(19\frac{2}{15}n + 17\frac{4}{7}\right) \left(19\frac{19}{29}n^2 - 2n - 1\right)$$

$$318) \left(1\frac{10}{33}m + 9\frac{19}{36}\right) \left(\frac{20}{21}m^2 + \frac{3}{5}m + 19\frac{1}{15}\right)$$

$$319) \left(1\frac{10}{37}r + \frac{33}{49}\right)\left(23\frac{28}{45}r^2 - 1\frac{11}{36}r + 1\frac{6}{7}\right)$$

$$320) \left(1\frac{19}{23}n + 18\frac{9}{25}\right)\left(25\frac{23}{38}n^2 - 2n + 19\frac{5}{41}\right)$$

$$321) \left(\frac{19}{40}b - 1\frac{18}{25}\right)\left(\frac{17}{30}b^2 - \frac{20}{23}b + 45\right)$$

$$322) \left(3\frac{2}{5}x - \frac{19}{37}\right)\left(\frac{4}{5}x^2 + 5\frac{22}{37}x + \frac{26}{45}\right)$$

$$323) \left(3\frac{39}{44}v + 19\frac{17}{38}\right)\left(1\frac{5}{23}v^2 + 7\frac{19}{32}v + 1\frac{8}{13}\right)$$

$$324) \left(9\frac{29}{30}x + 1\right)\left(\frac{1}{2}x^2 - 31x + 2\right)$$

$$325) \left(\frac{11}{47}a + 1\frac{17}{27}\right)\left(\frac{4}{5}a^2 + 19\frac{15}{17}a - \frac{19}{24}\right)$$

$$326) \left(1\frac{3}{13}x + 9\frac{29}{50}\right)\left(18\frac{16}{17}x^2 + 23\frac{37}{40}x - 1\frac{9}{10}\right)$$

$$327) \left(22\frac{1}{2}k + 1\frac{1}{3}\right)\left(1\frac{1}{32}k^2 + 11k - \frac{13}{19}\right)$$

$$328) \left(13\frac{11}{20}p + 11\frac{12}{35}\right)\left(1\frac{8}{27}p^2 - 1\frac{35}{36}p - \frac{4}{9}\right)$$

$$329) \left(\frac{5}{37}x + 23\right)\left(5\frac{41}{45}x^2 + 49x - 2\right)$$

$$330) \left(24\frac{4}{5}n - 1\frac{13}{25}\right)\left(24\frac{9}{11}n^2 + 1\frac{3}{11}n - 1\frac{19}{49}\right)$$

$$331) \left(\frac{3}{5}m + 18\frac{29}{41}\right)\left(2\frac{34}{45}m^2 + 8\frac{19}{40}m + 14\frac{20}{41}\right)$$

$$332) \left(9\frac{19}{27}r + 23\frac{13}{28}\right)\left(3\frac{15}{26}r^2 - 1\frac{9}{19}r + 23\frac{7}{11}\right)$$

$$333) \left(\frac{7}{44}x + 23\frac{4}{5}\right)\left(20\frac{1}{26}x^2 - 1\frac{1}{18}x + 17\frac{14}{33}\right)$$

$$334) \left(4\frac{12}{17}b - \frac{5}{11}\right)\left(20\frac{3}{8}b^2 - 2b + 23\frac{1}{2}\right)$$

$$335) \left(\frac{30}{49}n + 18\frac{11}{18}\right)\left(15\frac{35}{38}n^2 + 13\frac{45}{47}n - 1\frac{17}{18}\right)$$

$$336) \left(\frac{7}{34}v - \frac{5}{43}\right)\left(4\frac{1}{10}v^2 + 13\frac{1}{4}v + \frac{4}{35}\right)$$

$$337) \left(1\frac{1}{7}n + 1\frac{15}{19}\right)\left(9\frac{36}{49}n^2 - 1\frac{6}{35}n + 25\frac{9}{10}\right)$$

$$338) \left(15\frac{2}{3}x + 14\frac{35}{47}\right)\left(20\frac{5}{8}x^2 + 23x + 4\frac{16}{25}\right)$$

$$339) \left(\frac{4}{5}x + 18\frac{8}{9}\right)\left(1\frac{1}{2}x^2 - 39x + 2\frac{13}{14}\right)$$

$$340) \left(3\frac{11}{14}x + 1\frac{3}{8}\right)\left(14\frac{31}{48}x^2 + 3\frac{22}{23}x + 2\frac{17}{18}\right)$$

$$341) \left(16\frac{19}{24}a - 36\frac{17}{20}\right)\left(1\frac{6}{23}a^2 + 7\frac{1}{6}a + 6\frac{15}{37}\right)$$

$$342) \left(\frac{25}{31}n + 6\frac{23}{34}\right)\left(\frac{17}{48}n^2 + 19\frac{3}{4}n - \frac{3}{8}\right)$$

$$343) \left(22\frac{25}{42}k + 1\frac{11}{36}\right)\left(12\frac{8}{21}k^2 + 12k + 9\frac{19}{48}\right)$$

$$344) \left(4p - \frac{32}{43}\right)\left(\frac{15}{31}p^2 + 5\frac{23}{27}p - 2\frac{29}{34}\right)$$

$$345) \left(14\frac{12}{49}m + 20\frac{16}{19}\right)\left(m^2 + \frac{5}{11}m + 1\frac{3}{4}\right)$$

$$346) \left(1\frac{20}{21}x + 3\frac{1}{10}\right)\left(8\frac{11}{12}x^2 + \frac{15}{22}x + 1\frac{2}{27}\right)$$

$$347) \left(9\frac{7}{39}n + 2\frac{24}{35}\right)\left(8\frac{3}{7}n^2 - \frac{22}{41}n - \frac{3}{5}\right)$$

$$348) \left(\frac{6}{7}b + 43\right)\left(12\frac{25}{28}b^2 + 1\frac{17}{35}b + 5\frac{1}{29}\right)$$

$$349) \left(1\frac{1}{11}r - 1\frac{7}{8}\right)\left(19\frac{26}{43}r^2 + 11\frac{13}{48}r - 46\right)$$

$$350) \left(1\frac{12}{29}x - 3\frac{5}{12}\right)\left(\frac{3}{14}x^2 + \frac{1}{15}x + 37\frac{12}{13}\right)$$

$$351) \left(\frac{2}{7}b + \frac{12}{19}\right)\left(1\frac{11}{28}b^2 + 1\frac{31}{42}b + 22\frac{25}{39}\right)$$

$$352) \left(17\frac{1}{46}n - 1\frac{7}{29}\right)\left(10\frac{7}{8}n^2 - 1\frac{2}{15}n + 2\frac{15}{19}\right)$$

$$353) \left(\frac{7}{19}v + \frac{49}{50}\right)\left(25v^2 - 1\frac{7}{17}v + 6\frac{5}{19}\right)$$

$$354) \left(2x + \frac{4}{27}\right)\left(12x^2 + 46\frac{1}{20}x + 4\frac{1}{24}\right)$$

$$355) \left(9\frac{25}{36}x + 8\frac{1}{7}\right)\left(1\frac{10}{39}x^2 + 20\frac{5}{12}x + 1\frac{32}{35}\right)$$

$$356) \left(7a + 1\frac{41}{42}\right)\left(\frac{16}{29}a^2 + \frac{5}{24}a + 10\frac{2}{47}\right)$$

$$357) \left(4\frac{11}{26}k + 18\frac{9}{23}\right)\left(1\frac{5}{14}k^2 - k + 14\frac{11}{38}\right)$$

$$358) \left(22\frac{18}{43}p - 1\frac{9}{49}\right)\left(18\frac{23}{48}p^2 + 13\frac{29}{46}p + 9\frac{1}{22}\right)$$

$$359) \left(\frac{11}{29}n + 3\frac{1}{28}\right)\left(1\frac{32}{35}n^2 + 18\frac{3}{28}n + 14\frac{32}{39}\right)$$

$$360) \left(1\frac{1}{12}x + 1\frac{9}{40}\right)\left(17\frac{3}{16}x^2 + 1\frac{17}{33}x - \frac{3}{4}\right)$$

$$361) \left(\frac{31}{33}m + 9\frac{5}{16}\right)\left(\frac{7}{33}m^2 - 1\frac{3}{14}m + \frac{4}{21}\right)$$

$$362) \left(1\frac{3}{19}x + 19\frac{7}{18}\right)\left(1\frac{31}{47}x^2 + 1\frac{7}{50}x - 2\frac{38}{49}\right)$$

$$363) \left(14\frac{13}{50}r + 15\frac{9}{16}\right)\left(1\frac{1}{5}r^2 + \frac{8}{25}r + 7\frac{13}{34}\right)$$

$$364) \left(3\frac{9}{23}n + 25\frac{8}{45}\right)\left(\frac{33}{38}n^2 - \frac{1}{44}n + 46\frac{18}{25}\right)$$

$$365) \left(1\frac{17}{20}b - 1\frac{16}{43}\right)\left(1\frac{7}{13}b^2 + 1\frac{4}{5}b + 13\frac{5}{21}\right)$$

$$366) \left(6\frac{4}{9}v - 1\frac{4}{35}\right)\left(\frac{23}{24}v^2 - 1\frac{7}{39}v + 10\frac{1}{2}\right)$$

$$367) \left(9x + 11\frac{40}{41}\right)\left(19\frac{21}{26}x^2 + 11\frac{43}{48}x + 1\frac{43}{45}\right)$$

$$368) \left(\frac{3}{10}n + \frac{11}{19}\right)\left(\frac{19}{47}n^2 - 1\frac{31}{33}n + 7\frac{1}{12}\right)$$

$$369) \left(19\frac{7}{48}a + 19\frac{2}{9}\right)\left(27a^2 - \frac{4}{29}a - \frac{13}{22}\right)$$

$$370) \left(14\frac{25}{33}x + 1\frac{5}{7}\right)\left(1\frac{12}{37}x^2 + 18\frac{7}{8}x + \frac{5}{7}\right)$$

$$371) \left(1\frac{7}{8}k + 17\frac{44}{45}\right)\left(\frac{1}{2}k^2 + 25\frac{33}{47}k + 3\frac{3}{8}\right)$$

$$372) \left(10\frac{1}{6}n + 12\frac{5}{6}\right)\left(13\frac{27}{38}n^2 - 2\frac{19}{25}n + 1\frac{2}{11}\right)$$

$$373) \left(1\frac{11}{19}x + 15\frac{4}{21}\right)\left(\frac{2}{9}x^2 - \frac{23}{49}x + \frac{8}{23}\right)$$

$$374) \left(24\frac{11}{23}m + 10\frac{13}{33}\right)\left(3\frac{13}{24}m^2 + 1\frac{26}{49}m + 14\frac{4}{17}\right)$$

$$375) \left(1\frac{38}{41}p - 25\right)\left(24\frac{1}{4}p^2 + 12\frac{7}{30}p + 14\frac{14}{23}\right)$$

$$376) \left(8\frac{38}{45}x - 1\frac{1}{36}\right)\left(22\frac{17}{30}x^2 - \frac{2}{5}x - 1\frac{2}{7}\right)$$

$$377) \left(46n + 6\frac{14}{15}\right)\left(1\frac{6}{13}n^2 - \frac{43}{47}n - 1\frac{7}{18}\right)$$

$$378) \left(1\frac{23}{24}r + 1\frac{23}{48}\right)\left(\frac{13}{42}r^2 - 27r - 2\right)$$

$$379) \left(1\frac{1}{3}x + 28\right)\left(5\frac{17}{48}x^2 - 2\frac{5}{13}x + 3\frac{8}{33}\right)$$

$$380) \left(\frac{1}{20}n - 7\right)\left(1\frac{9}{20}n^2 + 1\frac{2}{9}n + \frac{40}{47}\right)$$

$$381) \left(11b + 1\frac{11}{40}\right)\left(\frac{19}{50}b^2 - \frac{5}{6}b - \frac{29}{34}\right)$$

$$382) \left(\frac{37}{38}b + 14\frac{32}{37}\right)\left(1\frac{1}{12}b^2 + 6\frac{6}{29}b + 6\frac{19}{48}\right)$$

$$383) \left(\frac{3}{10}x + \frac{9}{14}\right)\left(11\frac{11}{17}x^2 + 16\frac{43}{44}x + 23\frac{11}{28}\right)$$

$$384) \left(13\frac{13}{28}x - \frac{2}{3}\right)\left(1\frac{13}{15}x^2 + 1\frac{11}{12}x - 1\frac{35}{41}\right)$$

$$385) \left(16\frac{37}{42}v - \frac{6}{23}\right)\left(1\frac{1}{3}v^2 - 24v - 1\frac{11}{20}\right)$$

$$386) \left(11\frac{28}{45}a + 15\frac{1}{7}\right)\left(2\frac{11}{24}a^2 - 1\frac{10}{13}a + 13\frac{1}{12}\right)$$

$$387) \left(\frac{34}{49}k + \frac{2}{3}\right)\left(20\frac{9}{34}k^2 - \frac{29}{37}k - 46\right)$$

$$388) \left(49p + 1\frac{11}{14}\right)\left(22\frac{8}{17}p^2 + 1\frac{12}{29}p - 2\right)$$

$$389) \left(24\frac{27}{35}x + \frac{7}{20}\right)\left(8\frac{15}{16}x^2 + 18\frac{5}{48}x - 1\frac{5}{46}\right)$$

$$390) \left(1\frac{1}{3}n + 20\frac{17}{28}\right)\left(14\frac{11}{49}n^2 + 1\frac{27}{28}n - \frac{3}{37}\right)$$

$$391) \left(\frac{23}{25}r + 14\frac{4}{5}\right)\left(22\frac{17}{31}r^2 + 2r + \frac{11}{16}\right)$$

$$392) \left(1\frac{5}{8}m - \frac{29}{41}\right)\left(\frac{19}{31}m^2 + 8\frac{5}{7}m + 1\frac{7}{8}\right)$$

$$393) \left(20\frac{37}{42}x + 15\frac{3}{4}\right)\left(11x^2 - \frac{26}{37}x + 15\frac{17}{24}\right)$$

$$394) \left(\frac{2}{5}n - \frac{13}{15}\right)\left(46n^2 + \frac{15}{23}n + \frac{25}{37}\right)$$

$$395) \left(\frac{3}{5}b - \frac{38}{43}\right)\left(7\frac{5}{11}b^2 + 20\frac{1}{2}b + 1\frac{1}{4}\right)$$

$$396) \left(23\frac{27}{32}v + \frac{7}{13}\right)\left(20\frac{10}{43}v^2 + 25v + 1\frac{29}{49}\right)$$

$$397) \left(\frac{3}{5}n + 24\frac{1}{2}\right)\left(8\frac{31}{42}n^2 + 1\frac{1}{6}n + 15\frac{1}{10}\right)$$

$$398) \left(1\frac{25}{49}x + 1\frac{13}{19}\right)\left(1\frac{11}{50}x^2 + \frac{13}{17}x - \frac{1}{2}\right)$$

$$399) \left(3\frac{29}{39}k - \frac{5}{17}\right)\left(15\frac{25}{46}k^2 + 1\frac{1}{4}k + \frac{2}{21}\right)$$

$$400) \left(\frac{21}{22}a + 4\right)\left(\frac{2}{9}a^2 - \frac{1}{2}a + \frac{17}{20}\right)$$

$$401) \left(15\frac{58}{63}n + 1\right)\left(1\frac{1}{2}n^2 + 23\frac{1}{2}n - 1\frac{1}{47}\right)$$

$$402) \left(5\frac{7}{50}x - 1\frac{37}{55}\right)\left(\frac{34}{57}x^2 - 85x + 1\frac{2}{11}\right)$$

$$403) \left(\frac{7}{8}x + 45\frac{27}{43}\right)\left(1\frac{19}{82}x^2 + 8x - 1\frac{14}{33}\right)$$

$$404) \left(1\frac{43}{71}m + 1\frac{24}{29}\right)\left(47\frac{43}{63}m^2 + 71m - 64\right)$$

$$405) \left(15\frac{53}{78}p - 1\frac{3}{8}\right)\left(1\frac{16}{33}p^2 + 17\frac{3}{28}p + 1\frac{55}{96}\right)$$

$$406) \left(\frac{19}{84}x + 48\frac{7}{16}\right)\left(\frac{1}{19}x^2 - 68x + 13\frac{82}{91}\right)$$

$$407) \left(\frac{7}{46}n - 29\right)\left(\frac{28}{47}n^2 + \frac{7}{82}n + 34\frac{13}{54}\right)$$

$$408) \left(33\frac{40}{99}b + 46\frac{9}{50}\right)\left(\frac{7}{74}b^2 + 41b + 89\right)$$

$$409) \left(1\frac{2}{7}r + 36\frac{41}{45}\right)\left(\frac{23}{40}r^2 - 1\frac{4}{25}r + 1\frac{31}{81}\right)$$

$$410) \left(9\frac{3}{14}x + 7\frac{19}{24}\right)\left(\frac{1}{2}x^2 - 1\frac{14}{69}x + 24\frac{11}{19}\right)$$

$$411) \left(\frac{8}{21}n - \frac{17}{31}\right)\left(1\frac{15}{74}n^2 - 1\frac{11}{16}n + 37\frac{5}{6}\right)$$

$$412) \left(28\frac{1}{28}a - 1\frac{4}{19}\right)\left(\frac{36}{59}a^2 - 1\frac{5}{47}a - 39\frac{19}{22}\right)$$

$$413) \left(1\frac{19}{34}v - 1\frac{10}{17}\right)\left(1\frac{19}{21}v^2 + 1\frac{12}{43}v + 1\frac{5}{16}\right)$$

$$414) \left(\frac{16}{21}x - \frac{49}{60}\right)\left(\frac{1}{8}x^2 + 18\frac{14}{57}x - \frac{12}{37}\right)$$

$$415) \left(43\frac{26}{49}x + 31\right)\left(48\frac{7}{39}x^2 + 1\frac{33}{58}x + 16\right)$$

$$416) \left(1\frac{45}{56}a - 94\frac{15}{46}\right)\left(1\frac{12}{77}a^2 + \frac{5}{7}a + \frac{17}{46}\right)$$

$$417) \left(23\frac{13}{77}x - 1\frac{32}{35}\right)\left(15\frac{11}{20}x^2 - 1\frac{19}{24}x + 4\frac{32}{39}\right)$$

$$418) \left(46\frac{29}{63}k + 42\frac{55}{56}\right)\left(17\frac{1}{98}k^2 + 46\frac{69}{83}k + \frac{14}{19}\right)$$

$$419) \left(\frac{19}{35}p - 1\frac{9}{16}\right)\left(41\frac{37}{85}p^2 + 33\frac{19}{32}p + \frac{8}{99}\right)$$

$$420) \left(24\frac{79}{85}n + 15\frac{9}{25}\right)\left(2\frac{31}{39}n^2 + \frac{54}{97}n - 2\frac{45}{88}\right)$$

$$421) \left(6\frac{69}{98}r + \frac{59}{61}\right)\left(48\frac{71}{79}r^2 + \frac{9}{14}r + 29\frac{43}{51}\right)$$

$$422) \left(1\frac{83}{91}m - 3\frac{59}{62}\right)\left(1\frac{5}{21}m^2 - 1\frac{4}{11}m + 1\frac{1}{6}\right)$$

$$423) \left(29\frac{1}{7}x + 31\frac{45}{94}\right)\left(11\frac{65}{81}x^2 - 2\frac{3}{10}x + 42\right)$$

$$424) \left(30\frac{1}{14}n + 25\frac{53}{84}\right)\left(1\frac{9}{25}n^2 + \frac{1}{13}n + 37\frac{19}{36}\right)$$

$$425) \left(\frac{15}{28}v + 40\right)\left(32\frac{17}{56}v^2 - 1\frac{28}{45}v + 1\frac{27}{40}\right)$$

$$426) \left(34\frac{23}{35}x + 47\frac{33}{52}\right)\left(\frac{4}{9}x^2 - 1\frac{13}{14}x + 1\frac{17}{70}\right)$$

$$427) \left(1\frac{37}{41}n - 1\frac{13}{63}\right)\left(\frac{20}{31}n^2 + 8\frac{15}{49}n + 38\frac{39}{56}\right)$$

$$428) \left(\frac{1}{5}b + 46\frac{3}{34}\right)\left(\frac{1}{4}b^2 - \frac{1}{2}b + 26\frac{46}{85}\right)$$

$$429) \left(1\frac{5}{8}a + 10\frac{5}{6}\right)\left(1\frac{13}{63}a^2 - 1\frac{2}{41}a + 11\frac{37}{42}\right)$$

$$430) \left(35\frac{13}{56}k + 42\frac{37}{58}\right)\left(1\frac{58}{73}k^2 + 1\frac{8}{15}k + 16\frac{11}{96}\right)$$

$$431) \left(16\frac{34}{69}x - \frac{41}{50}\right)\left(x^2 + \frac{62}{97}x + 28\frac{11}{51}\right)$$

$$432) \left(1\frac{11}{63}x + 32\frac{13}{92}\right)\left(29x^2 - 1\frac{49}{72}x + 18\frac{69}{70}\right)$$

$$433) \left(\frac{59}{77}n + \frac{20}{39}\right)\left(\frac{36}{53}n^2 + 21\frac{18}{19}n - \frac{61}{88}\right)$$

$$434) \left(\frac{61}{84}m + \frac{39}{40}\right)\left(9m^2 + 30\frac{53}{56}m - \frac{11}{31}\right)$$

$$435) \left(11\frac{72}{91}p - \frac{9}{11}\right)\left(\frac{23}{58}p^2 + 1\frac{1}{33}p + 10\frac{23}{44}\right)$$

$$436) \left(\frac{6}{49}x + 39\frac{2}{7}\right)\left(\frac{7}{19}x^2 + 48\frac{27}{46}x - 1\frac{23}{42}\right)$$

$$437) \left(21\frac{1}{6}n + 48\frac{9}{13}\right)\left(1\frac{36}{43}n^2 + 1\frac{9}{56}n + 1\frac{28}{89}\right)$$

$$438) \left(88b + 1\frac{13}{71}\right)\left(1\frac{8}{9}b^2 + 49\frac{3}{10}b + 40\frac{39}{76}\right)$$

$$439) \left(26\frac{8}{21}r + 1\frac{6}{29}\right)\left(33\frac{49}{99}r^2 + 21\frac{14}{19}r + 1\frac{25}{27}\right)$$

$$440) \left(1\frac{10}{27}x + 1\frac{70}{79}\right)\left(38x^2 - 2\frac{5}{43}x - 1\frac{6}{25}\right)$$

$$441) \left(\frac{1}{34}n + 1\frac{9}{23}\right)\left(1\frac{14}{27}n^2 - 1\frac{1}{5}n - \frac{11}{45}\right)$$

$$442) \left(22\frac{37}{42}a + 1\frac{1}{65}\right)\left(1\frac{47}{78}a^2 + 1\frac{22}{39}a + 6\frac{3}{13}\right)$$

$$443) \left(\frac{2}{7}v - 1\frac{1}{10}\right)\left(8\frac{83}{98}v^2 - \frac{5}{29}v - 1\frac{8}{11}\right)$$

$$444) \left(7\frac{49}{55}x + 40\frac{11}{76}\right)\left(1\frac{4}{35}x^2 + 18\frac{85}{86}x - \frac{7}{15}\right)$$

$$445) \left(1\frac{1}{31}x - 92\right)\left(21\frac{14}{17}x^2 + 16\frac{1}{4}x - \frac{1}{13}\right)$$

$$446) \left(10\frac{27}{70}a + 47\frac{21}{55}\right)\left(100\frac{62}{97}a^2 + 32\frac{55}{79}a + \frac{17}{73}\right)$$

$$447) \left(1\frac{28}{83}p - 2\frac{7}{24}\right)\left(5\frac{23}{80}p^2 + 22\frac{28}{39}p - \frac{11}{19}\right)$$

$$448) \left(48\frac{47}{76}k + 1\frac{17}{19}\right)\left(22k^2 - 1\frac{65}{76}k + \frac{1}{3}\right)$$

$$449) \left(15x + 47\frac{48}{55}\right)\left(1\frac{77}{87}x^2 + 1\frac{8}{63}x + 41\frac{14}{31}\right)$$

$$450) \left(\frac{8}{49}n + \frac{10}{11}\right)\left(1\frac{7}{10}n^2 - 1\frac{17}{26}n + \frac{1}{2}\right)$$

$$451) \left(42\frac{3}{5}m + 35\frac{1}{4}\right)\left(\frac{5}{24}m^2 + \frac{1}{9}m + 39\frac{63}{86}\right)$$

$$452) \left(1\frac{7}{13}r + 12\frac{43}{96}\right)\left(\frac{3}{8}r^2 + 11\frac{7}{71}r - \frac{26}{43}\right)$$

$$453) \left(47\frac{23}{27}n + 34\frac{44}{73}\right)\left(25\frac{3}{8}n^2 - \frac{56}{81}n + 37\frac{43}{96}\right)$$

$$454) \left(x + \frac{17}{40}\right)\left(1\frac{33}{43}x^2 + \frac{28}{31}x + 17\frac{28}{53}\right)$$

$$455) \left(\frac{5}{34}b + 43\frac{9}{26}\right)\left(\frac{6}{11}b^2 + 1\frac{74}{79}b - 36\right)$$

$$456) \left(50\frac{36}{41}v - 2\frac{36}{53}\right)\left(14\frac{18}{35}v^2 - 1\frac{10}{57}v - 1\frac{12}{19}\right)$$

$$457) \left(\frac{11}{24}x + \frac{1}{6}\right)\left(\frac{11}{21}x^2 + 22\frac{4}{49}x + 11\frac{37}{94}\right)$$

$$458) \left(1\frac{47}{56}n - 1\frac{16}{31}\right)\left(18\frac{43}{64}n^2 + 34\frac{5}{12}n + 49\frac{8}{85}\right)$$

$$459) \left(42k + 6\frac{14}{39}\right)\left(9\frac{22}{83}k^2 + 65k + 2\right)$$

$$460) \left(20\frac{5}{62}a - 1\frac{1}{5}\right)\left(64a^2 + 29\frac{14}{17}a + 49\frac{23}{99}\right)$$

$$461) \left(46\frac{75}{77}x - \frac{8}{27}\right)\left(17\frac{1}{2}x^2 - 1\frac{49}{57}x - 1\frac{74}{83}\right)$$

$$462) \left(1\frac{2}{15}n - \frac{17}{35}\right)\left(42n^2 - 14\frac{3}{35}n + 1\right)$$

$$463) \left(35\frac{64}{97}m + 39\frac{17}{69}\right)\left(48\frac{41}{44}m^2 - 27m - 1\frac{13}{27}\right)$$

$$464) \left(32\frac{1}{83}x - 1\frac{32}{89}\right)\left(9\frac{11}{20}x^2 + \frac{16}{21}x + 12\right)$$

$$465) \left(1\frac{5}{6}p + 45\frac{50}{57}\right)\left(1\frac{21}{34}p^2 - 1\frac{11}{12}p + 15\frac{29}{52}\right)$$

$$466) \left(1\frac{1}{19}n - \frac{20}{43}\right)\left(72\frac{43}{66}n^2 - 1\frac{77}{97}n + 3\frac{61}{68}\right)$$

$$467) \left(38\frac{11}{12}x - \frac{9}{49}\right)\left(1\frac{51}{76}x^2 - 1\frac{1}{3}x + 32\frac{2}{19}\right)$$

$$468) \left(1\frac{8}{27}b + 15\frac{66}{85}\right)\left(4\frac{17}{20}b^2 + 33\frac{22}{23}b + 12\right)$$

$$469) \left(42\frac{23}{34}r + 17\frac{1}{18}\right)\left(33\frac{1}{8}r^2 + 49\frac{3}{44}r + 43\frac{59}{68}\right)$$

$$470) \left(88x - \frac{45}{79}\right)\left(12\frac{53}{82}x^2 - 1\frac{26}{47}x + 22\frac{31}{85}\right)$$

$$471) \left(70n + \frac{13}{24}\right)\left(1\frac{10}{33}n^2 + 3\frac{33}{70}n - 1\frac{33}{41}\right)$$

$$472) \left(1\frac{14}{55}a - 1\frac{19}{58}\right)\left(\frac{5}{11}a^2 - 3\frac{8}{55}a + 47\frac{32}{61}\right)$$

$$473) \left(22\frac{25}{62}v + 6\frac{59}{75}\right)\left(\frac{3}{16}v^2 + 8\frac{16}{87}v + 38\frac{35}{47}\right)$$

$$474) \left(34\frac{8}{69}x + 1\frac{2}{77}\right)\left(11x^2 - 1\frac{5}{27}x - 1\frac{2}{3}\right)$$

$$475) \left(\frac{53}{76}x + 48\frac{22}{87}\right)\left(1\frac{2}{3}x^2 + 18\frac{3}{10}x - \frac{1}{9}\right)$$

$$476) \left(1\frac{8}{45}k - 1\frac{55}{73}\right)\left(10\frac{3}{11}k^2 + 44\frac{3}{34}k + 44\frac{5}{54}\right)$$

$$477) \left(29\frac{53}{97}p + 15\frac{11}{24}\right)\left(35\frac{21}{38}p^2 - \frac{3}{11}p + 39\frac{53}{81}\right)$$

$$478) \left(x - 3\frac{10}{59}\right)\left(x^2 + 78x + 47\frac{25}{66}\right)$$

$$479) \left(27\frac{81}{83}n - 81\right)\left(\frac{29}{31}n^2 + 37n + 1\frac{1}{3}\right)$$

$$480) \left(32\frac{1}{12}n + 23\frac{3}{4}\right)\left(40\frac{2}{65}n^2 + 33\frac{1}{64}n + \frac{39}{43}\right)$$

$$481) \left(\frac{11}{26}r + 1\frac{7}{22}\right)\left(12\frac{5}{33}r^2 + 13\frac{65}{93}r - \frac{51}{80}\right)$$

$$482) \left(15m + 25\frac{43}{63}\right)\left(1\frac{7}{10}m^2 + 1\frac{19}{20}m + 3\frac{8}{81}\right)$$

$$483) \left(22\frac{32}{33}x - \frac{60}{77}\right)\left(24\frac{4}{7}x^2 + 1\frac{11}{39}x - 1\frac{3}{17}\right)$$

$$484) \left(\frac{6}{41}n + 13\frac{17}{74}\right)\left(\frac{12}{29}n^2 + 8\frac{8}{17}n + 14\frac{17}{53}\right)$$

$$485) \left(14\frac{41}{47}b + \frac{23}{52}\right)\left(13\frac{1}{42}b^2 - 1\frac{1}{9}b + 6\frac{33}{92}\right)$$

$$486) \left(1\frac{17}{18}v + \frac{58}{61}\right)\left(47\frac{11}{12}v^2 + 22\frac{41}{46}v + 23\frac{31}{74}\right)$$

$$487) \left(1\frac{19}{31}x - \frac{1}{2}\right)\left(\frac{11}{56}x^2 + \frac{18}{31}x - 1\frac{87}{95}\right)$$

$$488) \left(1\frac{18}{25}a - 1\frac{19}{30}\right)\left(48\frac{19}{45}a^2 + 35\frac{86}{93}a - \frac{10}{27}\right)$$

$$489) \left(18\frac{58}{69}n - 1\frac{19}{21}\right)\left(\frac{5}{12}n^2 + \frac{33}{64}n - 1\frac{53}{66}\right)$$

$$490) \left(1\frac{14}{45}p - 57\right)\left(42\frac{44}{45}p^2 + \frac{1}{31}p - \frac{39}{40}\right)$$

$$491) \left(21\frac{47}{83}k + 28\frac{82}{99}\right)\left(1\frac{1}{3}k^2 + 37\frac{31}{84}k + \frac{35}{92}\right)$$

$$492) \left(24\frac{35}{96}x - 1\frac{37}{79}\right)\left(25\frac{13}{40}x^2 - 1\frac{3}{11}x - \frac{31}{86}\right)$$

$$493) \left(1\frac{5}{6}m - 1\frac{1}{6}\right)\left(44\frac{32}{57}m^2 + 1\frac{8}{47}m - \frac{7}{12}\right)$$

$$494) \left(50\frac{3}{5}n + 12\frac{56}{69}\right)\left(1\frac{1}{11}n^2 + 2n + 35\frac{21}{31}\right)$$

$$495) \left(2\frac{14}{19}p + \frac{1}{6}\right)\left(1\frac{23}{27}p^2 + 32\frac{17}{48}p - 1\frac{7}{30}\right)$$

$$496) \left(75\frac{3}{25}x - 2\frac{3}{38}\right)\left(1\frac{31}{39}x^2 + 43\frac{1}{28}x - 2\frac{33}{53}\right)$$

$$497) \left(1\frac{8}{11}n + 50\frac{24}{35}\right)\left(\frac{3}{14}n^2 + 1\frac{10}{27}n + 38\frac{13}{35}\right)$$

$$498) \left(\frac{3}{5}b - \frac{76}{77}\right)\left(\frac{37}{45}b^2 + 1\frac{7}{13}b + 2\right)$$

$$499) \left(1\frac{6}{47}r + \frac{16}{21}\right)\left(\frac{80}{89}r^2 + 36\frac{4}{27}r + 32\frac{37}{82}\right)$$

$$500) \left(47\frac{41}{54}x + \frac{8}{25}\right)\left(\frac{23}{64}x^2 + 1\frac{11}{36}x + 28\frac{65}{74}\right)$$

$$501) \left(\frac{1}{34}a - 1\frac{45}{49}\right)\left(1\frac{5}{23}a^2 + 45\frac{59}{68}a - 1\frac{16}{89}\right)$$

$$502) \left(12\frac{11}{76}v - 98\right)\left(21\frac{13}{93}v^2 + \frac{1}{4}v + 33\frac{7}{81}\right)$$

$$503) \left(1\frac{13}{82}x + 48\frac{23}{36}\right)\left(50\frac{84}{97}x^2 + \frac{16}{63}x - 16\right)$$

$$504) \left(\frac{32}{61}n - 3\frac{1}{7}\right)\left(38\frac{29}{65}n^2 + 1\frac{23}{78}n + 12\frac{7}{10}\right)$$

$$505) \left(42\frac{66}{89}x - \frac{7}{44}\right)\left(35\frac{16}{21}x^2 - 1\frac{1}{9}x + 9\frac{1}{10}\right)$$

$$506) \left(1\frac{26}{97}n + 1\frac{3}{11}\right)\left(16\frac{1}{2}n^2 - \frac{45}{76}n + \frac{4}{7}\right)$$

$$507) \left(45\frac{3}{5}k + 11\frac{23}{24}\right)\left(2\frac{29}{36}k^2 - \frac{9}{25}k + 37\frac{43}{61}\right)$$

$$508) \left(46\frac{8}{11}p - 1\frac{1}{7}\right)\left(30\frac{58}{63}p^2 - 1\frac{7}{19}p + 27\frac{3}{10}\right)$$

$$509) \left(1\frac{9}{19}x + 1\frac{12}{17}\right)\left(1\frac{6}{35}x^2 - 1\frac{11}{16}x + 47\frac{80}{81}\right)$$

$$510) \left(23\frac{5}{26}n + 72\right)\left(13\frac{43}{91}n^2 - 1\frac{4}{5}n - 1\frac{71}{81}\right)$$

$$511) \left(\frac{17}{32}m + 16\frac{29}{38}\right)\left(1\frac{2}{5}m^2 + 31\frac{33}{38}m - 1\frac{7}{66}\right)$$

$$512) \left(9\frac{21}{40}r - 22\right)\left(3\frac{7}{20}r^2 - 1\frac{3}{7}r - \frac{1}{4}\right)$$

$$513) \left(\frac{37}{47}x + 44\frac{22}{23}\right)\left(1\frac{6}{11}x^2 + 30\frac{15}{62}x + 4\frac{19}{39}\right)$$

$$514) \left(\frac{49}{54}n + 6\frac{47}{66}\right)\left(1\frac{45}{56}n^2 + 48\frac{70}{99}n + 25\frac{2}{55}\right)$$

$$515) \left(14\frac{19}{60}b + 29\frac{29}{46}\right)\left(\frac{1}{2}b^2 + \frac{3}{14}b - \frac{19}{20}\right)$$

$$516) \left(\frac{3}{34}v - 1\frac{19}{26}\right)\left(\frac{19}{46}v^2 + 21v - \frac{11}{25}\right)$$

$$517) \left(33\frac{61}{75}x + 20\frac{17}{20}\right)\left(15\frac{59}{63}x^2 - \frac{73}{80}x + 35\frac{13}{98}\right)$$

$$518) \left(\frac{6}{41}n + \frac{4}{13}\right)\left(\frac{22}{35}n^2 + \frac{14}{87}n + 8\frac{34}{99}\right)$$

$$519) \left(36\frac{22}{89}a + \frac{8}{33}\right)\left(14\frac{16}{17}a^2 + 17\frac{3}{13}a + 11\frac{81}{100}\right)$$

$$520) \left(37\frac{73}{96}k - 1\frac{3}{5}\right)\left(10\frac{17}{22}k^2 + 31\frac{5}{6}k + 1\frac{33}{73}\right)$$

$$521) \left(10\frac{11}{12}x - 1\frac{3}{7}\right)\left(1\frac{12}{13}x^2 - \frac{1}{5}x + 26\frac{35}{68}\right)$$

$$522) \left(\frac{3}{4}p + 1\frac{25}{34}\right)\left(4\frac{33}{68}p^2 - 1\frac{8}{75}p + 50\frac{27}{56}\right)$$

$$523) \left(1\frac{1}{9}n + 23\frac{36}{55}\right)\left(6\frac{65}{72}n^2 + 49\frac{63}{64}n + 33\frac{47}{84}\right)$$

$$524) \left(\frac{14}{39}x - \frac{67}{83}\right)\left(38\frac{33}{91}x^2 + 25\frac{2}{17}x + 31\frac{8}{51}\right)$$

$$525) \left(17\frac{19}{25}m - \frac{35}{48}\right)\left(23\frac{55}{87}m^2 + 1\frac{1}{3}m - \frac{1}{10}\right)$$

$$526) \left(22\frac{7}{46}n + 20\frac{7}{17}\right)\left(2n^2 + 26\frac{13}{16}n + 11\frac{12}{67}\right)$$

$$527) \left(\frac{26}{33}p + \frac{13}{20}\right)\left(6\frac{43}{46}p^2 + 4\frac{1}{6}p + 43\frac{23}{66}\right)$$

$$528) \left(\frac{28}{61}r + 76\right)\left(1\frac{45}{67}r^2 + 6\frac{57}{58}r - 1\frac{1}{2}\right)$$

$$529) \left(\frac{36}{67}x + 42\frac{5}{56}\right)\left(\frac{37}{65}x^2 + 1\frac{11}{54}x - 56\right)$$

$$530) \left(1\frac{43}{54}b + 39\frac{40}{69}\right)\left(15\frac{4}{43}b^2 + 29\frac{10}{79}b + 7\frac{29}{38}\right)$$

$$531) \left(27\frac{23}{74}n - 88\right)\left(8\frac{25}{69}n^2 + 3\frac{31}{63}n - \frac{16}{25}\right)$$

$$532) \left(6\frac{55}{82}a + 74\right)\left(12\frac{3}{10}a^2 + 35\frac{5}{66}a - \frac{2}{13}\right)$$

$$533) \left(1\frac{57}{89}v + 2\frac{22}{85}\right)\left(43\frac{5}{12}v^2 - \frac{4}{49}v - \frac{10}{17}\right)$$

$$534) \left(32\frac{51}{95}x - 40\right)\left(1\frac{7}{29}x^2 - 45\frac{21}{88}x + \frac{11}{12}\right)$$

$$535) \left(7\frac{1}{4}x + 1\frac{2}{17}\right)\left(46\frac{33}{40}x^2 + 38\frac{11}{12}x - \frac{25}{68}\right)$$

$$536) \left(\frac{2}{11}n - 1\frac{13}{14}\right)\left(25n^2 + 1\frac{55}{76}n + 3\frac{1}{10}\right)$$

$$537) \left(23\frac{21}{32}x - \frac{28}{73}\right)\left(25\frac{14}{27}x^2 - 1\frac{5}{18}x - 1\frac{28}{73}\right)$$

$$538) \left(1\frac{11}{18}k + 72\frac{13}{80}\right)\left(1\frac{67}{75}k^2 - \frac{17}{89}k - \frac{33}{76}\right)$$

$$539) \left(\frac{23}{25}p + 1\frac{41}{99}\right)\left(\frac{16}{25}p^2 - \frac{58}{63}p + \frac{1}{2}\right)$$

$$540) \left(2n + 46\frac{41}{86}\right)\left(2n^2 + 56n + 1\frac{7}{22}\right)$$

$$541) \left(17\frac{37}{53}r + \frac{58}{61}\right)\left(50\frac{17}{38}r^2 - 43\frac{55}{61}r + 41\frac{13}{30}\right)$$

$$542) \left(x + 35\frac{15}{16}\right)\left(\frac{1}{13}x^2 - 1\frac{1}{5}x + 44\frac{29}{45}\right)$$

$$543) \left(16\frac{19}{46}m + \frac{13}{36}\right)\left(\frac{1}{6}m^2 + \frac{2}{95}m - 42\frac{19}{69}\right)$$

$$544) \left(20\frac{35}{68}n + 3\frac{21}{41}\right)\left(1\frac{14}{23}n^2 + 23\frac{20}{87}n - 100\frac{39}{50}\right)$$

$$545) \left(\frac{25}{74}b - \frac{2}{3}\right)\left(1\frac{50}{53}b^2 + 18\frac{58}{75}b + 1\frac{44}{79}\right)$$

$$546) \left(9\frac{67}{81}v + 8\frac{25}{28}\right)\left(18\frac{8}{65}v^2 - 1\frac{2}{13}v + 12\frac{17}{35}\right)$$

$$547) \left(\frac{39}{44}x + 1\frac{71}{87}\right)\left(\frac{8}{25}x^2 + 27\frac{19}{86}x + 35\frac{13}{42}\right)$$

$$548) \left(\frac{25}{96}n - 56\right)\left(\frac{23}{29}n^2 + \frac{25}{27}n - 1\frac{1}{2}\right)$$

$$549) \left(2\frac{1}{3}a + 29\frac{69}{88}\right)\left(49\frac{53}{90}a^2 - 1\frac{2}{41}a + 46\frac{77}{87}\right)$$

$$550) \left(\frac{3}{5}k + 25\frac{3}{17}\right)\left(1\frac{23}{50}k^2 + \frac{2}{3}k - 1\frac{7}{9}\right)$$

$$551) \left(4\frac{7}{18}p - \frac{1}{2}\right)\left(39\frac{41}{63}p^2 + 1\frac{2}{5}p + 34\frac{13}{84}\right)$$

$$552) \left(86x - 1\frac{12}{43}\right)\left(37\frac{23}{31}x^2 + \frac{3}{4}x + \frac{33}{41}\right)$$

$$553) \left(7\frac{12}{31}n - 1\frac{28}{47}\right)\left(34\frac{43}{70}n^2 + 6\frac{6}{65}n - \frac{31}{81}\right)$$

$$554) \left(\frac{25}{39}m + \frac{1}{11}\right)\left(30\frac{18}{83}m^2 + 23\frac{1}{4}m - \frac{43}{75}\right)$$

$$555) \left(\frac{15}{46}r - 1\frac{9}{11}\right)\left(\frac{7}{27}r^2 + 41\frac{56}{97}r - 85\right)$$

$$556) \left(37\frac{35}{52}x - \frac{14}{17}\right)\left(\frac{3}{17}x^2 - 52x + 17\frac{59}{66}\right)$$

$$557) \left(1\frac{1}{5}n - \frac{1}{2}\right)\left(\frac{61}{70}n^2 + \frac{14}{25}n + 25\frac{2}{7}\right)$$

$$558) \left(40\frac{54}{67}b + 1\frac{63}{95}\right)\left(43\frac{37}{62}b^2 + 37\frac{43}{70}b + 5\right)$$

$$559) \left(1\frac{51}{74}r + 44\frac{3}{5}\right)\left(1\frac{14}{15}r^2 - \frac{3}{5}r - 1\frac{23}{25}\right)$$

$$560) \left(\frac{2}{3}x + 4\frac{11}{47}\right)\left(33x^2 + 27\frac{5}{22}x + \frac{10}{13}\right)$$

$$561) \left(44\frac{69}{88}n + 1\frac{3}{64}\right)\left(1\frac{3}{4}n^2 + 1\frac{21}{34}n + \frac{2}{13}\right)$$

$$562) \left(\frac{1}{5}a + \frac{9}{17}\right)\left(29\frac{89}{92}a^2 + 12\frac{17}{46}a - 2\frac{25}{36}\right)$$

$$563) \left(13v + 35\frac{33}{70}\right)\left(\frac{2}{9}v^2 + 43\frac{73}{83}v - \frac{7}{29}\right)$$

$$564) \left(1\frac{4}{5}x - 1\frac{7}{10}\right)\left(\frac{71}{81}x^2 + 34\frac{17}{21}x + 1\frac{7}{16}\right)$$

$$565) \left(46\frac{13}{17}x + \frac{14}{23}\right)\left(1\frac{1}{59}x^2 + 1\frac{22}{81}x + \frac{21}{38}\right)$$

$$566) \left(38\frac{1}{24}n - \frac{1}{5}\right)\left(1\frac{26}{87}n^2 + 33\frac{41}{88}n - \frac{49}{82}\right)$$

$$567) \left(1\frac{1}{16}k + 7\right)\left(28\frac{41}{90}k^2 - 1\frac{11}{29}k + \frac{27}{31}\right)$$

$$568) \left(28\frac{3}{38}p + 1\frac{27}{91}\right)\left(19p^2 + 41\frac{20}{39}p + 1\frac{33}{49}\right)$$

$$569) \left(30\frac{43}{45}x + 37\frac{52}{81}\right)\left(48\frac{11}{29}x^2 + \frac{11}{16}x - \frac{1}{3}\right)$$

$$570) \left(\frac{45}{53}n + 32\frac{31}{78}\right)\left(\frac{3}{13}n^2 - 1\frac{13}{22}n - 51\right)$$

$$571) \left(4\frac{53}{60}m + 31\frac{73}{93}\right)\left(31\frac{44}{53}m^2 - \frac{1}{7}m + \frac{5}{33}\right)$$

$$572) \left(\frac{23}{66}r + 6\frac{59}{64}\right)\left(26\frac{85}{89}r^2 + 15\frac{49}{64}r + 38\frac{71}{78}\right)$$

$$573) \left(40n - 1\frac{29}{54}\right)\left(38\frac{19}{44}n^2 - 74n + 19\frac{49}{78}\right)$$

$$574) \left(24\frac{61}{74}x + \frac{65}{93}\right)\left(\frac{3}{7}x^2 + 78x + 10\frac{49}{78}\right)$$

$$575) \left(\frac{34}{87}b - 90\right)\left(\frac{26}{95}b^2 - 1\frac{29}{40}b - \frac{13}{27}\right)$$

$$576) \left(40\frac{41}{95}v + 25\frac{8}{9}\right)\left(1\frac{51}{86}v^2 + 6\frac{1}{4}v + \frac{2}{37}\right)$$

$$577) \left(1\frac{2}{3}x - 1\frac{9}{80}\right)\left(1\frac{13}{30}x^2 + 43\frac{67}{99}x - 48\right)$$

$$578) \left(17\frac{7}{10}n - \frac{10}{11}\right)\left(27\frac{2}{41}n^2 + 46\frac{13}{30}n + 38\frac{25}{26}\right)$$

$$579) \left(\frac{7}{17}a + 40\frac{7}{66}\right)\left(\frac{2}{25}a^2 + 19\frac{55}{82}a + 1\frac{6}{7}\right)$$

$$580) \left(19\frac{13}{24}k - 3\frac{14}{67}\right)\left(45\frac{17}{41}k^2 - 2k - 1\frac{4}{21}\right)$$

$$581) \left(21\frac{28}{31}p + \frac{8}{19}\right)\left(\frac{13}{41}p^2 + \frac{14}{71}p + 50\frac{68}{81}\right)$$

$$582) \left(\frac{6}{19}x + 44\frac{3}{94}\right)\left(44\frac{91}{96}x^2 + \frac{24}{41}x + \frac{32}{49}\right)$$

$$583) \left(24\frac{43}{45}n + 13\frac{8}{37}\right)\left(31\frac{77}{81}n^2 + \frac{3}{26}n + 9\frac{14}{47}\right)$$

$$584) \left(86m + \frac{10}{31}\right)\left(1\frac{21}{25}m^2 + 16\frac{5}{93}m - 36\right)$$

$$585) \left(92\frac{4}{59}r - 1\frac{15}{16}\right)\left(19\frac{11}{39}r^2 + 1\frac{58}{71}r + 9\frac{3}{7}\right)$$

$$586) \left(1\frac{28}{67}x + 47\frac{36}{67}\right)\left(1\frac{12}{53}x^2 - 1\frac{14}{31}x + 1\frac{49}{69}\right)$$

$$587) \left(1\frac{70}{73}n - 1\frac{8}{11}\right)\left(1\frac{2}{5}n^2 + \frac{14}{19}n + 33\frac{25}{96}\right)$$

$$588) \left(44\frac{39}{80}b + 11\frac{6}{49}\right)\left(\frac{4}{55}b^2 - 30b + 29\frac{31}{68}\right)$$

$$589) \left(1\frac{1}{44}r + 35\frac{89}{96}\right)\left(11\frac{51}{95}r^2 + \frac{13}{24}r + 8\frac{13}{49}\right)$$

$$590) \left(11\frac{49}{94}x + 22\frac{31}{54}\right)\left(21\frac{11}{12}x^2 - \frac{1}{11}x - 3\frac{1}{18}\right)$$

$$591) \left(1\frac{1}{2}n - \frac{40}{41}\right) \left(23\frac{2}{83}n^2 + 5\frac{77}{90}n - \frac{2}{87}\right)$$

$$592) \left(11\frac{1}{10}a + 9\frac{3}{43}\right) \left(1\frac{1}{2}a^2 + 24\frac{11}{13}a - 1\frac{6}{71}\right)$$

$$593) \left(12\frac{5}{17}v + 8\frac{5}{33}\right) \left(44\frac{17}{20}v^2 + \frac{69}{91}v - 1\frac{32}{37}\right)$$

$$594) \left(1\frac{12}{23}x - 21\right) \left(\frac{33}{56}x^2 + \frac{5}{21}x + 1\frac{59}{67}\right)$$

$$595) \left(13x + 7\frac{62}{77}\right) \left(\frac{4}{13}x^2 + 1\frac{23}{60}x - 79\right)$$

$$596) \left(1\frac{3}{19}n + 26\frac{57}{98}\right) \left(3\frac{77}{92}n^2 + 44\frac{49}{64}n + 11\frac{37}{65}\right)$$

$$597) \left(18\frac{11}{45}k + 34\frac{62}{91}\right) \left(1\frac{2}{25}k^2 + 48\frac{13}{28}k - \frac{88}{89}\right)$$

$$598) \left(\frac{7}{17}p + 38\frac{5}{84}\right) \left(\frac{7}{64}p^2 + \frac{1}{57}p + 1\frac{13}{15}\right)$$

$$599) \left(40\frac{59}{59}x + 14\frac{23}{28}\right) \left(\frac{5}{7}x^2 + 1\frac{64}{85}x + \frac{41}{60}\right)$$

$$600) \left(49\frac{5}{66}n + 49\frac{19}{28}\right) \left(1\frac{2}{17}n^2 - \frac{29}{91}n + 37\frac{25}{36}\right)$$

## Multiplying polynomials - Fractions - Simplify product of binomials and trinomials

Simplify product of fractions with one variable:

1)  $\left(2x - 3\frac{1}{4}\right)\left(\frac{1}{2}x^2 - 1\frac{1}{2}x - 1\frac{1}{5}\right)$

$x^3 - 4\frac{5}{8}x^2 + 2\frac{19}{40}x + 3\frac{9}{10}$

2)  $\left(4\frac{1}{4}m + 1\frac{2}{3}\right)\left(\frac{6}{7}m^2 + 2m + 1\frac{1}{7}\right)$

$3\frac{9}{14}m^3 + 9\frac{13}{14}m^2 + 8\frac{4}{21}m + 1\frac{19}{21}$

3)  $\left(2\frac{5}{8}p - 3\frac{3}{4}\right)\left(\frac{5}{6}p^2 + \frac{3}{7}p - 3\frac{6}{7}\right)$

$2\frac{3}{16}p^3 - 2p^2 - 11\frac{41}{56}p + 14\frac{13}{28}$

4)  $\left(\frac{3}{4}b - 1\frac{1}{2}\right)\left(1\frac{3}{4}b^2 - \frac{2}{3}b + \frac{2}{3}\right)$

$1\frac{5}{16}b^3 - 3\frac{1}{8}b^2 + 1\frac{1}{2}b - 1$

5)  $\left(1\frac{5}{8}n - 1\frac{1}{3}\right)\left(2\frac{1}{2}n^2 + 1\frac{5}{7}n - 1\frac{3}{4}\right)$

$4\frac{1}{16}n^3 - \frac{23}{42}n^2 - 5\frac{29}{224}n + 2\frac{1}{3}$

6)  $\left(2\frac{3}{8}r - 4\frac{3}{4}\right)\left(1\frac{1}{3}r^2 + 3\frac{1}{2}r + 2\frac{7}{8}\right)$

$3\frac{1}{6}r^3 + 1\frac{47}{48}r^2 - 9\frac{51}{64}r - 13\frac{21}{32}$

7)  $\left(1\frac{3}{8}n + \frac{1}{2}\right)\left(\frac{2}{3}n^2 + n + 2\right)$

$\frac{11}{12}n^3 + 1\frac{17}{24}n^2 + 3\frac{1}{4}n + 1$

8)  $\left(1\frac{1}{5}a + 3\frac{5}{6}\right)\left(1\frac{2}{3}a^2 - 1\frac{4}{7}a - 3\frac{3}{5}\right)$

$2a^3 + 4\frac{317}{630}a^2 - 10\frac{361}{1050}a - 13\frac{4}{5}$

9)  $\left(x + \frac{5}{8}\right)\left(\frac{5}{6}x^2 - 1\frac{3}{4}x - \frac{1}{5}\right)$

$\frac{5}{6}x^3 - 1\frac{11}{48}x^2 - 1\frac{47}{160}x - \frac{1}{8}$

10)  $\left(2v - 1\frac{2}{3}\right)\left(4\frac{1}{2}v^2 + 1\frac{1}{2}v - 2\frac{1}{6}\right)$

$9v^3 - 4\frac{1}{2}v^2 - 6\frac{5}{6}v + 3\frac{11}{18}$

11)  $\left(1\frac{2}{5}x - \frac{1}{2}\right)\left(1\frac{2}{3}x^2 + 2\frac{1}{7}x + 1\frac{1}{4}\right)$

$2\frac{1}{3}x^3 + 2\frac{1}{6}x^2 + \frac{19}{28}x - \frac{5}{8}$

12)  $\left(1\frac{3}{5}a - \frac{3}{5}\right)\left(2\frac{1}{2}a^2 + 3\frac{5}{6}a + 3\right)$

$4a^3 + 4\frac{19}{30}a^2 + 2\frac{1}{2}a - 1\frac{4}{5}$

13)  $\left(\frac{1}{2}x - 1\frac{3}{7}\right)\left(\frac{2}{5}x^2 + 1\frac{1}{8}x - 3\frac{6}{7}\right)$

$\frac{1}{5}x^3 - \frac{1}{112}x^2 - 3\frac{15}{28}x + 5\frac{25}{49}$

14)  $\left(3\frac{1}{2}k + 2\frac{2}{7}\right)\left(1\frac{3}{4}k^2 + 1\frac{2}{3}k - 1\frac{1}{4}\right)$

$6\frac{1}{8}k^3 + 9\frac{5}{6}k^2 - \frac{95}{168}k - 2\frac{6}{7}$

15)  $\left(\frac{1}{6}p + \frac{1}{3}\right)\left(1\frac{1}{2}p^2 + 2\frac{1}{2}p - 2\frac{1}{6}\right)$

$\frac{1}{4}p^3 + \frac{11}{12}p^2 + \frac{17}{36}p - \frac{13}{18}$

16)  $\left(1\frac{1}{2}x + 2\frac{3}{4}\right)\left(3\frac{5}{7}x^2 - 2x + 1\frac{1}{6}\right)$

$5\frac{4}{7}x^3 + 7\frac{3}{14}x^2 - 3\frac{3}{4}x + 3\frac{5}{24}$

17)  $\left(\frac{2}{5}n + 3\frac{1}{8}\right)\left(4\frac{3}{7}n^2 - 1\frac{2}{3}n + 4\frac{5}{6}\right)$

$1\frac{27}{35}n^3 + 13\frac{29}{168}n^2 - 3\frac{11}{40}n + 15\frac{5}{48}$

18)  $\left(3\frac{2}{3}m + 1\right)\left(\frac{2}{3}m^2 - 2\frac{1}{5}m - 1\frac{1}{2}\right)$

$2\frac{4}{9}m^3 - 7\frac{2}{5}m^2 - 7\frac{7}{10}m - 1\frac{1}{2}$

- 19)  $\left(\frac{1}{2}x + 7\frac{4}{5}\right)\left(4\frac{5}{8}x^2 + 3\frac{3}{8}x - 2\frac{4}{7}\right)$   
 $2\frac{5}{16}x^3 + 37\frac{61}{80}x^2 + 25\frac{11}{280}x - 20\frac{2}{35}$
- 20)  $\left(1\frac{5}{6}r + 1\frac{2}{5}\right)\left(4\frac{1}{5}r^2 + \frac{2}{5}r + \frac{1}{3}\right)$   
 $7\frac{7}{10}r^3 + 6\frac{46}{75}r^2 + 1\frac{77}{450}r + \frac{7}{15}$
- 21)  $\left(1\frac{2}{3}b + \frac{1}{2}\right)\left(\frac{3}{5}b^2 - \frac{1}{3}b + \frac{5}{7}\right)$   
 $b^3 - \frac{23}{90}b^2 + 1\frac{1}{42}b + \frac{5}{14}$
- 22)  $\left(2\frac{4}{5}n + 3\frac{1}{4}\right)\left(\frac{5}{7}n^2 + 1\frac{1}{5}n - \frac{1}{3}\right)$   
 $2n^3 + 5\frac{477}{700}n^2 + 2\frac{29}{30}n - 1\frac{1}{12}$
- 23)  $\left(4\frac{1}{6}v - \frac{4}{7}\right)\left(\frac{1}{4}v^2 - \frac{2}{5}v + 1\right)$   
 $1\frac{1}{24}v^3 - 1\frac{17}{21}v^2 + 4\frac{83}{210}v - \frac{4}{7}$
- 24)  $\left(2x - \frac{4}{7}\right)\left(3\frac{1}{8}x^2 - 2\frac{1}{3}x + 5\right)$   
 $6\frac{1}{4}x^3 - 6\frac{19}{42}x^2 + 11\frac{1}{3}x - 2\frac{6}{7}$
- 25)  $\left(4\frac{5}{6}n + \frac{2}{5}\right)\left(1\frac{2}{3}n^2 + 4\frac{3}{8}n - 1\right)$   
 $8\frac{1}{18}n^3 + 21\frac{13}{16}n^2 - 3\frac{1}{12}n - \frac{2}{5}$
- 26)  $\left(\frac{1}{3}a - 4\frac{1}{2}\right)\left(a^2 - 1\frac{3}{5}a - 2\frac{1}{4}\right)$   
 $\frac{1}{3}a^3 - 5\frac{1}{30}a^2 + 6\frac{9}{20}a + 10\frac{1}{8}$
- 27)  $\left(1\frac{5}{6}k + 4\frac{1}{3}\right)\left(2k^2 - k + 2\frac{2}{3}\right)$   
 $3\frac{2}{3}k^3 + 6\frac{5}{6}k^2 + \frac{5}{9}k + 11\frac{5}{9}$
- 28)  $\left(\frac{2}{3}x - 1\right)\left(\frac{4}{5}x^2 + 1\frac{2}{5}x + 1\frac{7}{8}\right)$   
 $\frac{8}{15}x^3 + \frac{2}{15}x^2 - \frac{3}{20}x - 1\frac{7}{8}$
- 29)  $\left(4\frac{5}{7}x - 2\frac{1}{2}\right)\left(\frac{1}{3}x^2 + 2\frac{7}{8}x + 1\frac{5}{6}\right)$   
 $1\frac{4}{7}x^3 + 12\frac{121}{168}x^2 + 1\frac{51}{112}x - 4\frac{7}{12}$
- 30)  $\left(1\frac{1}{3}n + 3\frac{5}{8}\right)\left(1\frac{5}{7}n^2 - 3\frac{5}{6}n + 4\frac{1}{3}\right)$   
 $2\frac{2}{7}n^3 + 1\frac{13}{126}n^2 - 8\frac{17}{144}n + 15\frac{17}{24}$
- 31)  $\left(1\frac{1}{3}p + 1\frac{3}{5}\right)\left(p^2 - p + 1\frac{5}{6}\right)$   
 $1\frac{1}{3}p^3 + \frac{4}{15}p^2 + \frac{38}{45}p + 2\frac{14}{15}$
- 32)  $\left(\frac{2}{7}m - 1\frac{1}{2}\right)\left(1\frac{7}{8}m^2 + 8\frac{1}{6}m - 1\right)$   
 $\frac{15}{28}m^3 - \frac{23}{48}m^2 - 12\frac{15}{28}m + 1\frac{1}{2}$
- 33)  $\left(4\frac{5}{7}x + 1\frac{1}{2}\right)\left(3\frac{5}{7}x^2 - x + 2\right)$   
 $17\frac{25}{49}x^3 + \frac{6}{7}x^2 + 7\frac{13}{14}x + 3$
- 34)  $\left(1\frac{1}{3}r + 8\right)\left(3\frac{7}{8}r^2 + 3\frac{5}{6}r - 1\frac{4}{5}\right)$   
 $5\frac{1}{6}r^3 + 36\frac{1}{9}r^2 + 28\frac{4}{15}r - 14\frac{2}{5}$
- 35)  $\left(6b + 3\frac{2}{3}\right)\left(\frac{3}{4}b^2 - 2\frac{1}{8}b - 2\frac{2}{5}\right)$   
 $4\frac{1}{2}b^3 - 10b^2 - 22\frac{23}{120}b - 8\frac{4}{5}$
- 36)  $\left(x + 1\frac{2}{5}\right)\left(1\frac{4}{7}x^2 + 2x - 1\frac{1}{5}\right)$   
 $1\frac{4}{7}x^3 + 4\frac{1}{5}x^2 + 1\frac{3}{5}x - 1\frac{17}{25}$
- 37)  $\left(1\frac{1}{4}n + 1\frac{1}{2}\right)\left(1\frac{5}{8}n^2 + \frac{1}{2}n + 2\frac{5}{8}\right)$   
 $2\frac{1}{32}n^3 + 3\frac{1}{16}n^2 + 4\frac{1}{32}n + 3\frac{15}{16}$
- 38)  $\left(2n + 1\frac{1}{4}\right)\left(4\frac{1}{2}n^2 + n - \frac{5}{6}\right)$   
 $9n^3 + 7\frac{5}{8}n^2 - \frac{5}{12}n - 1\frac{1}{24}$

$$39) \left(3\frac{1}{3}v - 1\right)\left(v^2 + 4\frac{5}{7}v + 1\frac{1}{5}\right)$$

$$3\frac{1}{3}v^3 + 14\frac{5}{7}v^2 - \frac{5}{7}v - 1\frac{1}{5}$$

$$41) \left(\frac{6}{7}a - 3\frac{2}{3}\right)\left(\frac{1}{4}a^2 + 1\frac{1}{5}a + 1\frac{1}{2}\right)$$

$$\frac{3}{14}a^3 + \frac{47}{420}a^2 - 3\frac{4}{35}a - 5\frac{1}{2}$$

$$43) \left(\frac{5}{7}n + 1\frac{1}{4}\right)\left(1\frac{4}{7}n^2 - \frac{4}{7}n + 3\frac{1}{2}\right)$$

$$1\frac{6}{49}n^3 + 1\frac{109}{196}n^2 + 1\frac{11}{14}n + 4\frac{3}{8}$$

$$45) \left(1\frac{3}{4}k + 1\frac{1}{4}\right)\left(2\frac{3}{7}k^2 + 2\frac{7}{8}k - 1\frac{2}{3}\right)$$

$$4\frac{1}{4}k^3 + 8\frac{15}{224}k^2 + \frac{65}{96}k - 2\frac{1}{12}$$

$$47) \left(\frac{5}{8}n - 1\frac{1}{6}\right)\left(1\frac{2}{3}n^2 - 3\frac{1}{2}n + \frac{1}{2}\right)$$

$$1\frac{1}{24}n^3 - 4\frac{19}{144}n^2 + 4\frac{19}{48}n - \frac{7}{12}$$

$$49) \left(1\frac{1}{2}r - 2\frac{4}{5}\right)\left(1\frac{1}{8}r^2 + 3\frac{1}{6}r + 2\frac{3}{8}\right)$$

$$1\frac{11}{16}r^3 + 1\frac{3}{5}r^2 - 5\frac{73}{240}r - 6\frac{13}{20}$$

$$51) \left(\frac{1}{8}n - \frac{1}{2}\right)\left(n^2 - 2\frac{2}{3}n + 1\right)$$

$$\frac{1}{8}n^3 - \frac{5}{6}n^2 + 1\frac{11}{24}n - \frac{1}{2}$$

$$53) \left(v - 1\frac{4}{7}\right)\left(2\frac{5}{6}v^2 + 4\frac{5}{6}v + \frac{1}{2}\right)$$

$$2\frac{5}{6}v^3 + \frac{8}{21}v^2 - 7\frac{2}{21}v - \frac{11}{14}$$

$$55) \left(2\frac{3}{8}n - 3\frac{1}{3}\right)\left(\frac{5}{7}n^2 + 1\frac{1}{2}n - 1\frac{1}{8}\right)$$

$$1\frac{39}{56}n^3 + 1\frac{61}{336}n^2 - 7\frac{43}{64}n + 3\frac{3}{4}$$

$$57) \left(8k + \frac{1}{8}\right)\left(k^2 + 1\frac{1}{5}k - 2\right)$$

$$8k^3 + 9\frac{29}{40}k^2 - 15\frac{17}{20}k - \frac{1}{4}$$

$$40) \left(x - 1\frac{2}{7}\right)\left(1\frac{1}{8}x^2 - 2\frac{5}{6}x + 3\frac{1}{2}\right)$$

$$1\frac{1}{8}x^3 - 4\frac{47}{168}x^2 + 7\frac{1}{7}x - 4\frac{1}{2}$$

$$42) \left(\frac{1}{2}x + 2\frac{3}{7}\right)\left(2\frac{1}{2}x^2 - 2\frac{3}{8}x + 1\frac{1}{5}\right)$$

$$1\frac{1}{4}x^3 + 4\frac{99}{112}x^2 - 5\frac{47}{280}x + 2\frac{32}{35}$$

$$44) \left(\frac{5}{8}p + \frac{6}{7}\right)\left(1\frac{2}{7}p^2 - p + \frac{2}{3}\right)$$

$$\frac{45}{56}p^3 + \frac{187}{392}p^2 - \frac{37}{84}p + \frac{4}{7}$$

$$46) \left(2x - 1\frac{1}{2}\right)\left(\frac{3}{7}x^2 - 3\frac{1}{2}x + 4\frac{1}{6}\right)$$

$$\frac{6}{7}x^3 - 7\frac{9}{14}x^2 + 13\frac{7}{12}x - 6\frac{1}{4}$$

$$48) \left(7\frac{2}{5}m + 3\frac{1}{2}\right)\left(\frac{5}{6}m^2 + \frac{1}{6}m + \frac{1}{2}\right)$$

$$6\frac{1}{6}m^3 + 4\frac{3}{20}m^2 + 4\frac{17}{60}m + 1\frac{3}{4}$$

$$50) \left(4\frac{3}{5}x + 1\right)\left(2x^2 - 1\frac{1}{4}x + 2\frac{2}{5}\right)$$

$$9\frac{1}{5}x^3 - 3\frac{3}{4}x^2 + 9\frac{79}{100}x + 2\frac{2}{5}$$

$$52) \left(4\frac{4}{5}b + 3\frac{1}{2}\right)\left(6b^2 - 1\frac{1}{2}b + 4\frac{1}{5}\right)$$

$$28\frac{4}{5}b^3 + 13\frac{4}{5}b^2 + 14\frac{91}{100}b + 14\frac{7}{10}$$

$$54) \left(x + 1\frac{2}{3}\right)\left(\frac{1}{3}x^2 - 3\frac{1}{8}x - 3\frac{2}{7}\right)$$

$$\frac{1}{3}x^3 - 2\frac{41}{72}x^2 - 8\frac{83}{168}x - 5\frac{10}{21}$$

$$56) \left(8a + \frac{1}{4}\right)\left(\frac{1}{2}a^2 + a + 2\right)$$

$$4a^3 + 8\frac{1}{8}a^2 + 16\frac{1}{4}a + \frac{1}{2}$$

$$58) \left(p + \frac{1}{4}\right)\left(\frac{5}{8}p^2 - 2\frac{1}{4}p + 3\right)$$

$$\frac{5}{8}p^3 - 2\frac{3}{32}p^2 + 2\frac{7}{16}p + \frac{3}{4}$$

- 59)  $\left(1\frac{5}{8}x + 1\right)\left(x^2 + 2\frac{2}{3}x + 2\right)$   
 $1\frac{5}{8}x^3 + 5\frac{1}{3}x^2 + 5\frac{11}{12}x + 2$
- 60)  $\left(4\frac{1}{6}n + 1\frac{6}{7}\right)\left(3\frac{2}{5}n^2 + 4\frac{2}{5}n + 4\frac{1}{8}\right)$   
 $14\frac{1}{6}n^3 + 24\frac{68}{105}n^2 + 25\frac{201}{560}n + 7\frac{37}{56}$
- 61)  $\left(1\frac{1}{2}m + \frac{3}{5}\right)\left(3\frac{2}{7}m^2 - m - 2\right)$   
 $4\frac{13}{14}m^3 + \frac{33}{70}m^2 - 3\frac{3}{5}m - 1\frac{1}{5}$
- 62)  $\left(1\frac{2}{5}p - 2\frac{1}{4}\right)\left(5\frac{1}{6}p^2 + p - 4\right)$   
 $7\frac{7}{30}p^3 - 10\frac{9}{40}p^2 - 7\frac{17}{20}p + 9$
- 63)  $\left(\frac{2}{3}x - \frac{1}{2}\right)\left(4\frac{2}{3}x^2 + 2\frac{2}{7}x - 2\frac{2}{3}\right)$   
 $3\frac{1}{9}x^3 - \frac{17}{21}x^2 - 2\frac{58}{63}x + 1\frac{1}{3}$
- 64)  $\left(3\frac{1}{6}n - \frac{1}{7}\right)\left(\frac{1}{6}n^2 - 3\frac{5}{7}n + 5\right)$   
 $\frac{19}{36}n^3 - 11\frac{11}{14}n^2 + 16\frac{107}{294}n - \frac{5}{7}$
- 65)  $\left(\frac{2}{3}r - 1\frac{1}{6}\right)\left(2r^2 - \frac{1}{3}r + 1\frac{3}{4}\right)$   
 $1\frac{1}{3}r^3 - 2\frac{5}{9}r^2 + 1\frac{5}{9}r - 2\frac{1}{24}$
- 66)  $\left(\frac{1}{2}b + \frac{6}{7}\right)\left(\frac{7}{8}b^2 - \frac{4}{7}b - \frac{4}{7}\right)$   
 $\frac{7}{16}b^3 + \frac{13}{28}b^2 - \frac{38}{49}b - \frac{24}{49}$
- 67)  $\left(6x - 3\frac{1}{2}\right)\left(1\frac{4}{5}x^2 + \frac{1}{2}x + 3\frac{3}{5}\right)$   
 $10\frac{4}{5}x^3 - 3\frac{3}{10}x^2 + 19\frac{17}{20}x - 12\frac{3}{5}$
- 68)  $\left(1\frac{1}{2}n + 1\frac{3}{4}\right)\left(5\frac{2}{7}n^2 + \frac{1}{2}n + 4\frac{3}{4}\right)$   
 $7\frac{13}{14}n^3 + 10n^2 + 8n + 8\frac{5}{16}$
- 69)  $\left(3\frac{1}{6}v + 3\frac{1}{4}\right)\left(\frac{1}{2}v^2 - 1\frac{1}{4}v - 2\frac{5}{6}\right)$   
 $1\frac{7}{12}v^3 - 2\frac{1}{3}v^2 - 13\frac{5}{144}v - 9\frac{5}{24}$
- 70)  $\left(1\frac{1}{3}a + 1\frac{1}{2}\right)\left(4\frac{2}{7}a^2 - 5a - 1\frac{3}{8}\right)$   
 $5\frac{5}{7}a^3 - \frac{5}{21}a^2 - 9\frac{1}{3}a - 2\frac{1}{16}$
- 71)  $\left(\frac{1}{3}x + 1\frac{1}{4}\right)\left(1\frac{1}{2}x^2 - 3\frac{1}{5}x + \frac{5}{6}\right)$   
 $\frac{1}{2}x^3 + \frac{97}{120}x^2 - 3\frac{13}{18}x + 1\frac{1}{24}$
- 72)  $\left(2\frac{1}{6}x + 1\frac{5}{6}\right)\left(\frac{3}{8}x^2 + 1\frac{1}{2}x - 1\frac{1}{4}\right)$   
 $\frac{13}{16}x^3 + 3\frac{15}{16}x^2 + \frac{1}{24}x - 2\frac{7}{24}$
- 73)  $\left(3\frac{1}{6}k + 7\frac{2}{7}\right)\left(\frac{5}{6}k^2 + 2k + 1\frac{3}{5}\right)$   
 $2\frac{23}{36}k^3 + 12\frac{17}{42}k^2 + 19\frac{67}{105}k + 11\frac{23}{35}$
- 74)  $\left(\frac{2}{3}n + \frac{3}{4}\right)\left(\frac{1}{3}n^2 + 4\frac{2}{5}n + 3\frac{1}{7}\right)$   
 $\frac{2}{9}n^3 + 3\frac{11}{60}n^2 + 5\frac{83}{210}n + 2\frac{5}{14}$
- 75)  $\left(1\frac{1}{7}x - 3\frac{7}{8}\right)\left(2\frac{4}{5}x^2 + 1\frac{2}{5}x + 4\frac{3}{4}\right)$   
 $3\frac{1}{5}x^3 - 9\frac{1}{4}x^2 + \frac{1}{280}x - 18\frac{13}{32}$
- 76)  $\left(\frac{1}{3}p - 2\frac{3}{7}\right)\left(\frac{1}{2}p^2 - 1\frac{1}{8}p - 6\right)$   
 $\frac{1}{6}p^3 - 1\frac{33}{56}p^2 + \frac{41}{56}p + 14\frac{4}{7}$
- 77)  $\left(\frac{2}{3}n + \frac{1}{3}\right)\left(\frac{2}{3}n^2 + 1\frac{3}{8}n - 1\frac{5}{8}\right)$   
 $\frac{4}{9}n^3 + 1\frac{5}{36}n^2 - \frac{5}{8}n - \frac{13}{24}$
- 78)  $\left(\frac{1}{4}r - 5\right)\left(1\frac{4}{7}r^2 - \frac{1}{2}r - 1\right)$   
 $\frac{11}{28}r^3 - 7\frac{55}{56}r^2 + 2\frac{1}{4}r + 5$

$$79) \left(2m + \frac{5}{8}\right)\left(\frac{1}{6}m^2 - 1\frac{1}{8}m + 2\right)$$

$$\frac{1}{3}m^3 - 2\frac{7}{48}m^2 + 3\frac{19}{64}m + 1\frac{1}{4}$$

$$81) \left(2x - 1\frac{1}{3}\right)\left(\frac{1}{4}x^2 + 1\frac{1}{7}x - 1\frac{3}{8}\right)$$

$$\frac{1}{2}x^3 + 1\frac{20}{21}x^2 - 4\frac{23}{84}x + 1\frac{5}{6}$$

$$83) \left(\frac{3}{8}b + 1\frac{7}{8}\right)\left(3\frac{3}{4}b^2 - 1\frac{4}{5}b + 1\right)$$

$$1\frac{13}{32}b^3 + 6\frac{57}{160}b^2 - 3b + 1\frac{7}{8}$$

$$85) \left(\frac{1}{4}n + 2\frac{1}{4}\right)\left(1\frac{1}{6}n^2 - 4n + 1\frac{2}{7}\right)$$

$$\frac{7}{24}n^3 + 1\frac{5}{8}n^2 - 8\frac{19}{28}n + 2\frac{25}{28}$$

$$87) \left(4\frac{5}{8}a - 2\frac{5}{8}\right)\left(\frac{1}{5}a^2 - \frac{2}{3}a + 1\frac{4}{5}\right)$$

$$\frac{37}{40}a^3 - 3\frac{73}{120}a^2 + 10\frac{3}{40}a - 4\frac{29}{40}$$

$$89) \left(1\frac{1}{4}x + 1\frac{1}{2}\right)\left(1\frac{1}{3}x^2 + 3x - 4\right)$$

$$1\frac{2}{3}x^3 + 5\frac{3}{4}x^2 - \frac{1}{2}x - 6$$

$$91) \left(2\frac{1}{4}m - 1\frac{1}{8}\right)\left(3\frac{3}{4}m^2 - 3\frac{2}{7}m + 1\frac{1}{7}\right)$$

$$8\frac{7}{16}m^3 - 11\frac{137}{224}m^2 + 4\frac{1}{56}m - \frac{9}{56}$$

$$93) \left(1\frac{2}{5}x + 1\frac{1}{2}\right)\left(x^2 + 1\frac{1}{2}x + 2\right)$$

$$1\frac{2}{5}x^3 + 3\frac{3}{5}x^2 + 5\frac{1}{20}x + 3$$

$$95) \left(1\frac{4}{5}b + 3\frac{5}{6}\right)\left(1\frac{5}{6}b^2 + 2\frac{1}{6}b + 1\frac{2}{3}\right)$$

$$3\frac{3}{10}b^3 + 10\frac{167}{180}b^2 + 11\frac{11}{36}b + 6\frac{7}{18}$$

$$97) \left(3\frac{1}{2}n - 2\frac{5}{8}\right)\left(7n^2 + 3\frac{1}{8}n - \frac{1}{7}\right)$$

$$24\frac{1}{2}n^3 - 7\frac{7}{16}n^2 - 8\frac{45}{64}n + \frac{3}{8}$$

$$80) \left(\frac{2}{3}n + \frac{1}{2}\right)\left(n^2 + 2n + 1\frac{1}{4}\right)$$

$$\frac{2}{3}n^3 + 1\frac{5}{6}n^2 + 1\frac{5}{6}n + \frac{5}{8}$$

$$82) \left(\frac{1}{8}v + 1\frac{1}{6}\right)\left(4\frac{3}{8}v^2 + 3\frac{2}{3}v - 1\frac{1}{2}\right)$$

$$\frac{35}{64}v^3 + 5\frac{9}{16}v^2 + 4\frac{13}{144}v - 1\frac{3}{4}$$

$$84) \left(4\frac{2}{7}x - \frac{4}{5}\right)\left(1\frac{1}{8}x^2 - 2\frac{1}{6}x + \frac{2}{3}\right)$$

$$4\frac{23}{28}x^3 - 10\frac{13}{70}x^2 + 4\frac{62}{105}x - \frac{8}{15}$$

$$86) \left(4\frac{3}{4}k - 7\right)\left(k^2 + 2k - \frac{4}{5}\right)$$

$$4\frac{3}{4}k^3 + 2\frac{1}{2}k^2 - 17\frac{4}{5}k + 5\frac{3}{5}$$

$$88) \left(1\frac{6}{7}p - 2\frac{5}{8}\right)\left(4\frac{5}{6}p^2 + \frac{3}{4}p - 2\right)$$

$$8\frac{41}{42}p^3 - 11\frac{33}{112}p^2 - 5\frac{153}{224}p + 5\frac{1}{4}$$

$$90) \left(1\frac{3}{4}n + \frac{1}{2}\right)\left(3\frac{2}{3}n^2 - \frac{2}{3}n + 1\frac{3}{4}\right)$$

$$6\frac{5}{12}n^3 + \frac{2}{3}n^2 + 2\frac{35}{48}n + \frac{7}{8}$$

$$92) \left(\frac{3}{8}p - 2\frac{2}{3}\right)\left(3\frac{3}{5}p^2 + 1\frac{5}{6}p + 1\frac{3}{7}\right)$$

$$1\frac{7}{20}p^3 - 8\frac{73}{80}p^2 - 4\frac{89}{252}p - 3\frac{17}{21}$$

$$94) \left(\frac{5}{8}n + \frac{1}{5}\right)\left(\frac{2}{5}n^2 - 1\frac{4}{7}n + 1\frac{2}{5}\right)$$

$$\frac{1}{4}n^3 - \frac{1263}{1400}n^2 + \frac{157}{280}n + \frac{7}{25}$$

$$96) \left(\frac{3}{8}r + \frac{1}{3}\right)\left(1\frac{1}{4}r^2 + 2r - 6\right)$$

$$\frac{15}{32}r^3 + 1\frac{1}{6}r^2 - 1\frac{7}{12}r - 2$$

$$98) \left(1\frac{3}{5}x + 1\frac{1}{4}\right)\left(1\frac{1}{3}x^2 + 3\frac{1}{3}x - \frac{5}{8}\right)$$

$$2\frac{2}{15}x^3 + 7x^2 + 3\frac{1}{6}x - \frac{25}{32}$$

$$99) \left(\frac{7}{8}v + 1\frac{7}{8}\right)\left(\frac{2}{3}v^2 - 1\frac{1}{5}v + 3\frac{1}{3}\right)$$

$$\frac{7}{12}v^3 + \frac{1}{5}v^2 + \frac{2}{3}v + 6\frac{1}{4}$$

$$101) \left(1\frac{2}{3}x + 3\frac{5}{8}\right)\left(1\frac{5}{6}x^2 + \frac{1}{4}x + 6\frac{3}{10}\right)$$

$$3\frac{1}{18}x^3 + 7\frac{1}{16}x^2 + 11\frac{13}{32}x + 22\frac{67}{80}$$

$$103) \left(1\frac{1}{6}n - 1\frac{6}{11}\right)\left(4\frac{3}{5}n^2 - 2n + \frac{1}{3}\right)$$

$$5\frac{11}{30}n^3 - 9\frac{73}{165}n^2 + 3\frac{95}{198}n - 1\frac{17}{33}$$

$$105) \left(2\frac{3}{5}x + 4\frac{8}{11}\right)\left(1\frac{2}{9}x^2 + 6\frac{5}{8}x + \frac{4}{5}\right)$$

$$3\frac{8}{45}x^3 + 23\frac{1}{360}x^2 + 33\frac{219}{550}x + 3\frac{43}{55}$$

$$107) \left(\frac{1}{12}n - 2\right)\left(\frac{3}{5}n^2 + 3\frac{6}{7}n + 1\frac{1}{2}\right)$$

$$\frac{1}{20}n^3 - \frac{123}{140}n^2 - 7\frac{33}{56}n - 3$$

$$109) \left(1\frac{1}{4}r - 2\right)\left(\frac{1}{3}r^2 + 1\frac{1}{2}r + 1\frac{1}{4}\right)$$

$$\frac{5}{12}r^3 + 1\frac{5}{24}r^2 - 1\frac{7}{16}r - 2\frac{1}{2}$$

$$111) \left(3\frac{3}{8}n + 6\frac{3}{4}\right)\left(1\frac{8}{11}n^2 + \frac{5}{12}n - \frac{2}{3}\right)$$

$$5\frac{73}{88}n^3 + 13\frac{23}{352}n^2 + \frac{9}{16}n - 4\frac{1}{2}$$

$$113) \left(5\frac{7}{10}v - 1\right)\left(2\frac{5}{12}v^2 + 1\frac{4}{5}v - 3\frac{11}{12}\right)$$

$$13\frac{31}{40}v^3 + 7\frac{253}{300}v^2 - 24\frac{1}{8}v + 3\frac{11}{12}$$

$$115) \left(1\frac{2}{5}n + \frac{3}{4}\right)\left(\frac{5}{12}n^2 + 4\frac{2}{9}n - 1\frac{2}{7}\right)$$

$$\frac{7}{12}n^3 + 6\frac{161}{720}n^2 + 1\frac{11}{30}n - \frac{27}{28}$$

$$117) \left(1\frac{5}{6}k - 2\right)\left(\frac{1}{5}k^2 - 2k - \frac{5}{12}\right)$$

$$\frac{11}{30}k^3 - 4\frac{1}{15}k^2 + 3\frac{17}{72}k + \frac{5}{6}$$

$$100) \left(3\frac{1}{5}a + \frac{3}{5}\right)\left(4\frac{3}{4}a^2 - 2\frac{3}{5}a + 3\frac{1}{3}\right)$$

$$15\frac{1}{5}a^3 - 5\frac{47}{100}a^2 + 9\frac{8}{75}a + 2$$

$$102) \left(\frac{1}{2}x + 5\frac{1}{12}\right)\left(2x^2 + 3\frac{1}{3}x + 1\frac{5}{7}\right)$$

$$x^3 + 11\frac{5}{6}x^2 + 17\frac{101}{126}x + 8\frac{5}{7}$$

$$104) \left(\frac{2}{3}k - 1\frac{3}{10}\right)\left(5\frac{5}{9}k^2 + 4\frac{4}{5}k + 4\frac{1}{8}\right)$$

$$3\frac{19}{27}k^3 - 4\frac{1}{45}k^2 - 3\frac{49}{100}k - 5\frac{29}{80}$$

$$106) \left(4\frac{4}{9}m - 1\right)\left(5\frac{5}{9}m^2 + 1\frac{5}{11}m - 1\frac{3}{10}\right)$$

$$24\frac{56}{81}m^3 + \frac{10}{11}m^2 - 7\frac{23}{99}m + 1\frac{3}{10}$$

$$108) \left(4\frac{4}{9}p + 5\frac{7}{10}\right)\left(1\frac{1}{6}p^2 - \frac{5}{6}p - 2\frac{1}{4}\right)$$

$$5\frac{5}{27}p^3 + 2\frac{511}{540}p^2 - 14\frac{3}{4}p - 12\frac{33}{40}$$

$$110) \left(\frac{7}{11}x - 1\frac{2}{3}\right)\left(5\frac{3}{5}x^2 + 11x - 3\frac{9}{10}\right)$$

$$3\frac{31}{55}x^3 - 2\frac{1}{3}x^2 - 20\frac{269}{330}x + 6\frac{1}{2}$$

$$112) \left(2b + \frac{7}{10}\right)\left(\frac{1}{10}b^2 + 1\frac{1}{8}b + 5\frac{3}{8}\right)$$

$$\frac{1}{5}b^3 + 2\frac{8}{25}b^2 + 11\frac{43}{80}b + 3\frac{61}{80}$$

$$114) \left(\frac{5}{7}x + \frac{3}{7}\right)\left(1\frac{1}{2}x^2 + 8x + \frac{1}{2}\right)$$

$$1\frac{1}{14}x^3 + 6\frac{5}{14}x^2 + 3\frac{11}{14}x + \frac{3}{14}$$

$$116) \left(3\frac{1}{9}a + 3\frac{7}{8}\right)\left(\frac{1}{3}a^2 + 1\frac{2}{3}a - 2\frac{1}{2}\right)$$

$$1\frac{1}{27}a^3 + 6\frac{103}{216}a^2 - 1\frac{23}{72}a - 9\frac{11}{16}$$

$$118) \left(2\frac{1}{2}p + 2\frac{5}{9}\right)\left(6\frac{8}{11}p^2 + \frac{1}{4}p + 1\frac{7}{11}\right)$$

$$16\frac{9}{11}p^3 + 17\frac{647}{792}p^2 + 4\frac{289}{396}p + 4\frac{2}{11}$$

$$119) \left(1\frac{1}{3}x - 3\frac{1}{12}\right)\left(12x^2 + \frac{1}{10}x + 1\right)$$

$$16x^3 - 36\frac{13}{15}x^2 + 1\frac{1}{40}x - 3\frac{1}{12}$$

$$121) \left(\frac{3}{5}n + 1\frac{3}{11}\right)\left(1\frac{1}{10}n^2 + 1\frac{1}{3}n - 1\right)$$

$$\frac{33}{50}n^3 + 2\frac{1}{5}n^2 + 1\frac{16}{165}n - 1\frac{3}{11}$$

$$123) \left(6\frac{1}{4}x + 1\right)\left(\frac{4}{7}x^2 + x - 2\frac{5}{8}\right)$$

$$3\frac{4}{7}x^3 + 6\frac{23}{28}x^2 - 15\frac{13}{32}x - 2\frac{5}{8}$$

$$125) \left(2r - 1\frac{1}{2}\right)\left(1\frac{1}{2}r^2 + 6\frac{5}{7}r - 1\frac{3}{10}\right)$$

$$3r^3 + 11\frac{5}{28}r^2 - 12\frac{47}{70}r + 1\frac{19}{20}$$

$$127) \left(\frac{1}{2}x - 1\frac{4}{11}\right)\left(5\frac{1}{6}x^2 - 12x + \frac{3}{4}\right)$$

$$2\frac{7}{12}x^3 - 13\frac{1}{22}x^2 + 16\frac{65}{88}x - 1\frac{1}{44}$$

$$129) \left(a - 1\frac{2}{3}\right)\left(2\frac{5}{6}a^2 - 3\frac{7}{12}a - 2\right)$$

$$2\frac{5}{6}a^3 - 8\frac{11}{36}a^2 + 3\frac{35}{36}a + 3\frac{1}{3}$$

$$131) \left(x + \frac{5}{6}\right)\left(4\frac{1}{8}x^2 + 5\frac{8}{11}x - 3\frac{3}{8}\right)$$

$$4\frac{1}{8}x^3 + 9\frac{29}{176}x^2 + 1\frac{35}{88}x - 2\frac{13}{16}$$

$$133) \left(\frac{1}{5}k + 4\frac{1}{2}\right)\left(3\frac{1}{7}k^2 - k - 2\frac{1}{2}\right)$$

$$\frac{22}{35}k^3 + 13\frac{33}{35}k^2 - 5k - 11\frac{1}{4}$$

$$135) \left(\frac{1}{2}x + \frac{7}{10}\right)\left(\frac{1}{3}x^2 - 1\frac{10}{11}x - 2\frac{3}{10}\right)$$

$$\frac{1}{6}x^3 - \frac{119}{165}x^2 - 2\frac{107}{220}x - 1\frac{61}{100}$$

$$137) \left(7m - \frac{4}{5}\right)\left(3\frac{5}{8}m^2 - m + \frac{1}{2}\right)$$

$$25\frac{3}{8}m^3 - 9\frac{9}{10}m^2 + 4\frac{3}{10}m - \frac{2}{5}$$

$$120) \left(2\frac{5}{12}m + 1\right)\left(1\frac{2}{3}m^2 - \frac{4}{9}m + 1\frac{2}{9}\right)$$

$$4\frac{1}{36}m^3 + \frac{16}{27}m^2 + 2\frac{55}{108}m + 1\frac{2}{9}$$

$$122) \left(2r + \frac{1}{7}\right)\left(r^2 + 3\frac{1}{2}r - 4\right)$$

$$2r^3 + 7\frac{1}{7}r^2 - 7\frac{1}{2}r - \frac{4}{7}$$

$$124) \left(\frac{6}{7}b + 4\frac{1}{4}\right)\left(2b^2 - 1\frac{2}{3}b - 1\right)$$

$$1\frac{5}{7}b^3 + 7\frac{1}{14}b^2 - 7\frac{79}{84}b - 4\frac{1}{4}$$

$$126) \left(1\frac{8}{11}n + 1\frac{1}{4}\right)\left(4\frac{3}{10}n^2 - 1\frac{3}{10}n + 6\frac{4}{5}\right)$$

$$7\frac{47}{110}n^3 + 3\frac{57}{440}n^2 + 10\frac{53}{440}n + 8\frac{1}{2}$$

$$128) \left(5\frac{1}{6}n + 1\frac{1}{3}\right)\left(6\frac{11}{12}n^2 + 6\frac{2}{11}n - 3\frac{2}{3}\right)$$

$$35\frac{53}{72}n^3 + 41\frac{16}{99}n^2 - 10\frac{139}{198}n - 4\frac{8}{9}$$

$$130) \left(2\frac{7}{10}v - 1\frac{1}{3}\right)\left(1\frac{2}{3}v^2 + 6\frac{1}{6}v + 5\frac{1}{4}\right)$$

$$4\frac{1}{2}v^3 + 14\frac{77}{180}v^2 + 5\frac{343}{360}v - 7$$

$$132) \left(1\frac{4}{9}n - \frac{2}{3}\right)\left(5\frac{1}{2}n^2 + \frac{9}{10}n - 1\frac{1}{3}\right)$$

$$7\frac{17}{18}n^3 - 2\frac{11}{30}n^2 - 2\frac{71}{135}n + \frac{8}{9}$$

$$134) \left(3\frac{5}{12}x + \frac{5}{8}\right)\left(6\frac{3}{11}x^2 + 2x + 5\frac{1}{2}\right)$$

$$21\frac{19}{44}x^3 + 10\frac{199}{264}x^2 + 20\frac{1}{24}x + 3\frac{7}{16}$$

$$136) \left(2\frac{6}{11}p + 1\frac{8}{11}\right)\left(\frac{3}{8}p^2 + \frac{1}{3}p - 1\frac{2}{3}\right)$$

$$\frac{21}{22}p^3 + 1\frac{131}{264}p^2 - 3\frac{2}{3}p - 2\frac{29}{33}$$

$$138) \left(4\frac{3}{4}n + 2\frac{5}{12}\right)\left(4\frac{1}{7}n^2 + 1\frac{1}{2}n + 1\frac{1}{2}\right)$$

$$19\frac{19}{28}n^3 + 17\frac{23}{168}n^2 + 10\frac{3}{4}n + 3\frac{5}{8}$$

$$139) \left(7r + 1\frac{7}{10}\right)\left(1\frac{2}{3}r^2 + 6\frac{1}{2}r + 5\frac{1}{10}\right)$$

$$11\frac{2}{3}r^3 + 48\frac{1}{3}r^2 + 46\frac{3}{4}r + 8\frac{67}{100}$$

$$141) \left(\frac{2}{5}b - 9\right)\left(1\frac{3}{10}b^2 + \frac{3}{4}b - 2\frac{1}{8}\right)$$

$$\frac{13}{25}b^3 - 11\frac{2}{5}b^2 - 7\frac{3}{5}b + 19\frac{1}{8}$$

$$143) \left(1\frac{7}{10}n - 3\frac{3}{4}\right)\left(n^2 + \frac{1}{12}n + 1\frac{7}{10}\right)$$

$$1\frac{7}{10}n^3 - 3\frac{73}{120}n^2 + 2\frac{231}{400}n - 6\frac{3}{8}$$

$$145) \left(3\frac{3}{5}n + 4\frac{7}{8}\right)\left(2\frac{1}{12}n^2 + n + 4\frac{1}{2}\right)$$

$$7\frac{1}{2}n^3 + 13\frac{121}{160}n^2 + 21\frac{3}{40}n + 21\frac{15}{16}$$

$$147) \left(1\frac{5}{6}a - 1\frac{4}{7}\right)\left(3\frac{3}{7}a^2 + 5\frac{4}{5}a + 5\frac{8}{9}\right)$$

$$6\frac{2}{7}a^3 + 5\frac{361}{1470}a^2 + 1\frac{1289}{1890}a - 9\frac{16}{63}$$

$$149) \left(12x - 3\frac{2}{5}\right)\left(3\frac{1}{10}x^2 + 4\frac{1}{10}x + 1\frac{5}{7}\right)$$

$$37\frac{1}{5}x^3 + 38\frac{33}{50}x^2 + 6\frac{221}{350}x - 5\frac{29}{35}$$

$$151) \left(1\frac{2}{3}m - 2\frac{11}{12}\right)\left(5\frac{4}{9}m^2 + 3\frac{7}{10}m + 1\frac{2}{3}\right)$$

$$9\frac{2}{27}m^3 - 9\frac{77}{108}m^2 - 8\frac{1}{72}m - 4\frac{31}{36}$$

$$153) \left(n + 4\frac{5}{7}\right)\left(\frac{1}{7}n^2 + n + 3\frac{5}{12}\right)$$

$$\frac{1}{7}n^3 + 1\frac{33}{49}n^2 + 8\frac{11}{84}n + 16\frac{3}{28}$$

$$155) \left(1\frac{3}{10}b - \frac{2}{3}\right)\left(\frac{2}{7}b^2 - 3\frac{5}{9}b - 1\frac{1}{5}\right)$$

$$\frac{13}{35}b^3 - 4\frac{256}{315}b^2 + \frac{547}{675}b + \frac{4}{5}$$

$$157) \left(1\frac{5}{8}n + 1\frac{1}{2}\right)\left(6\frac{1}{7}n^2 + \frac{1}{3}n - 1\frac{4}{5}\right)$$

$$9\frac{55}{56}n^3 + 9\frac{127}{168}n^2 - 2\frac{17}{40}n - 2\frac{7}{10}$$

$$140) \left(12\frac{1}{2}v + 4\frac{3}{4}\right)\left(1\frac{1}{3}v^2 + 1\frac{1}{3}v - 2\frac{1}{4}\right)$$

$$16\frac{2}{3}v^3 + 23v^2 - 21\frac{19}{24}v - 10\frac{11}{16}$$

$$142) \left(3\frac{2}{3}x + 1\frac{1}{2}\right)\left(3\frac{1}{11}x^2 - \frac{1}{6}x + 1\frac{2}{7}\right)$$

$$11\frac{1}{3}x^3 + 4\frac{5}{198}x^2 + 4\frac{13}{28}x + 1\frac{13}{14}$$

$$144) \left(1\frac{8}{9}x + 3\frac{3}{10}\right)\left(1\frac{1}{12}x^2 + 4\frac{11}{12}x + 2\frac{8}{9}\right)$$

$$2\frac{5}{108}x^3 + 12\frac{931}{1080}x^2 + 21\frac{2209}{3240}x + 9\frac{8}{15}$$

$$146) \left(5\frac{1}{8}k - 1\frac{3}{8}\right)\left(4\frac{4}{9}k^2 + 7k + 4\frac{1}{6}\right)$$

$$22\frac{7}{9}k^3 + 29\frac{55}{72}k^2 + 11\frac{35}{48}k - 5\frac{35}{48}$$

$$148) \left(2\frac{1}{4}p - \frac{2}{7}\right)\left(2\frac{4}{9}p^2 + 2\frac{2}{7}p - 2\frac{5}{9}\right)$$

$$5\frac{1}{2}p^3 + 4\frac{4}{9}p^2 - 6\frac{79}{196}p + \frac{46}{63}$$

$$150) \left(1\frac{3}{11}n - \frac{5}{7}\right)\left(\frac{3}{8}n^2 + \frac{2}{5}n + 1\right)$$

$$\frac{21}{44}n^3 + \frac{743}{3080}n^2 + \frac{76}{77}n - \frac{5}{7}$$

$$152) \left(6\frac{5}{11}r + \frac{1}{2}\right)\left(\frac{9}{11}r^2 - 1\frac{7}{8}r - 1\frac{1}{3}\right)$$

$$5\frac{34}{121}r^3 - 11\frac{61}{88}r^2 - 9\frac{287}{528}r - \frac{2}{3}$$

$$154) \left(2x + 1\frac{4}{9}\right)\left(6\frac{3}{7}x^2 + 3\frac{7}{10}x - 3\frac{3}{4}\right)$$

$$12\frac{6}{7}x^3 + 16\frac{24}{35}x^2 - 2\frac{7}{45}x - 5\frac{5}{12}$$

$$156) \left(\frac{2}{3}r + 1\frac{1}{2}\right)\left(r^2 + 2\frac{7}{8}r + \frac{2}{5}\right)$$

$$\frac{2}{3}r^3 + 3\frac{5}{12}r^2 + 4\frac{139}{240}r + \frac{3}{5}$$

$$158) \left(5\frac{1}{12}x - 3\frac{4}{7}\right)\left(1\frac{1}{2}x^2 + 1\frac{3}{8}x + 3\right)$$

$$7\frac{5}{8}x^3 + 1\frac{425}{672}x^2 + 10\frac{19}{56}x - 10\frac{5}{7}$$

$$159) \left(2\frac{3}{5}a + 6\frac{5}{7}\right)\left(\frac{2}{5}a^2 + 4\frac{1}{4}a + 6\frac{5}{6}\right)$$

$$1\frac{1}{25}a^3 + 13\frac{103}{140}a^2 + 46\frac{127}{420}a + 45\frac{37}{42}$$

$$161) \left(1\frac{5}{7}x + 9\right)\left(2x^2 + 1\frac{7}{9}x - 1\frac{1}{6}\right)$$

$$3\frac{3}{7}x^3 + 21\frac{1}{21}x^2 + 14x - 10\frac{1}{2}$$

$$163) \left(3\frac{4}{7}k + \frac{1}{5}\right)\left(k^2 - 3\frac{5}{8}k - 5\right)$$

$$3\frac{4}{7}k^3 - 12\frac{209}{280}k^2 - 18\frac{163}{280}k - 1$$

$$165) \left(p - 1\frac{1}{3}\right)\left(1\frac{5}{8}p^2 + 1\frac{5}{9}p - \frac{1}{2}\right)$$

$$1\frac{5}{8}p^3 - 12\frac{31}{54}p^2 - 2\frac{31}{54}p + \frac{2}{3}$$

$$167) \left(3\frac{5}{6}n + 4\frac{5}{8}\right)\left(\frac{7}{11}n^2 - 2n + \frac{1}{2}\right)$$

$$2\frac{29}{66}n^3 - 4\frac{191}{264}n^2 - 7\frac{1}{3}n + 2\frac{5}{16}$$

$$169) \left(8n + \frac{2}{3}\right)\left(6\frac{1}{11}n^2 + 10n - 1\frac{3}{5}\right)$$

$$48\frac{8}{11}n^3 + 84\frac{2}{33}n^2 - 6\frac{2}{15}n - 1\frac{1}{15}$$

$$171) \left(1\frac{3}{5}x - 2\frac{1}{8}\right)\left(\frac{7}{8}x^2 - \frac{11}{12}x - \frac{1}{6}\right)$$

$$1\frac{2}{5}x^3 - 3\frac{313}{960}x^2 + 1\frac{109}{160}x + \frac{17}{48}$$

$$173) \left(1\frac{2}{3}b + 1\frac{3}{5}\right)\left(1\frac{1}{8}b^2 + 4\frac{1}{6}b + 2\frac{1}{2}\right)$$

$$1\frac{7}{8}b^3 + 8\frac{67}{90}b^2 + 10\frac{5}{6}b + 4$$

$$175) \left(\frac{5}{8}a - 1\frac{2}{5}\right)\left(1\frac{1}{3}a^2 + 1\frac{4}{9}a + 2\frac{3}{4}\right)$$

$$\frac{5}{6}a^3 - \frac{347}{360}a^2 - \frac{437}{1440}a - 3\frac{17}{20}$$

$$177) \left(3\frac{1}{10}k + 5\frac{1}{9}\right)\left(4\frac{4}{7}k^2 + 1\frac{1}{2}k + 4\frac{1}{2}\right)$$

$$14\frac{6}{35}k^3 + 28\frac{19}{1260}k^2 + 21\frac{37}{60}k + 23$$

$$160) \left(\frac{1}{8}v + \frac{1}{2}\right)\left(5\frac{7}{8}v^2 + 2\frac{1}{5}v - \frac{5}{12}\right)$$

$$\frac{47}{64}v^3 + 3\frac{17}{80}v^2 + 1\frac{23}{480}v - \frac{5}{24}$$

$$162) \left(\frac{8}{11}n + 3\frac{5}{7}\right)\left(1\frac{3}{10}n^2 + 5\frac{6}{7}n - 1\frac{1}{4}\right)$$

$$\frac{52}{55}n^3 + 9\frac{34}{385}n^2 + 20\frac{456}{539}n - 4\frac{9}{14}$$

$$164) \left(1\frac{3}{4}x - 3\frac{1}{9}\right)\left(2x^2 + 5\frac{3}{4}x - 1\frac{3}{5}\right)$$

$$3\frac{1}{2}x^3 + 3\frac{121}{144}x^2 - 20\frac{31}{45}x + 4\frac{44}{45}$$

$$166) \left(4\frac{9}{10}x - 1\frac{1}{3}\right)\left(\frac{7}{8}x^2 + \frac{7}{9}x + \frac{7}{11}\right)$$

$$4\frac{23}{80}x^3 + 2\frac{29}{45}x^2 + 2\frac{241}{2970}x - \frac{28}{33}$$

$$168) \left(3\frac{1}{9}r + 1\frac{1}{3}\right)\left(1\frac{3}{5}r^2 - 2\frac{2}{11}r + 4\frac{6}{11}\right)$$

$$4\frac{44}{45}r^3 - 4\frac{36}{55}r^2 + 11\frac{23}{99}r + 6\frac{2}{33}$$

$$170) \left(\frac{2}{3}m - 1\frac{9}{10}\right)\left(1\frac{1}{8}m^2 - \frac{1}{5}m + 1\frac{2}{3}\right)$$

$$\frac{3}{4}m^3 - 2\frac{13}{48}m^2 + 1\frac{221}{450}m - 3\frac{1}{6}$$

$$172) \left(4\frac{8}{11}x - \frac{1}{7}\right)\left(2\frac{3}{8}x^2 - 12x - 1\frac{1}{2}\right)$$

$$11\frac{5}{22}x^3 - 57\frac{41}{616}x^2 - 5\frac{29}{77}x + \frac{3}{14}$$

$$174) \left(\frac{3}{4}v + 2\frac{3}{4}\right)\left(9v^2 - \frac{3}{4}v + 1\frac{4}{7}\right)$$

$$6\frac{3}{4}v^3 + 24\frac{3}{16}v^2 - \frac{99}{112}v + 4\frac{9}{28}$$

$$176) \left(2n + 1\frac{11}{12}\right)\left(3\frac{3}{8}n^2 + 1\frac{1}{5}n + 6\frac{5}{6}\right)$$

$$6\frac{3}{4}n^3 + 8\frac{139}{160}n^2 + 15\frac{29}{30}n + 13\frac{7}{72}$$

$$178) \left(5\frac{1}{3}x + \frac{3}{5}\right)\left(\frac{1}{12}x^2 + \frac{3}{8}x - 1\frac{1}{2}\right)$$

$$\frac{4}{9}x^3 + 2\frac{1}{20}x^2 - 7\frac{31}{40}x - \frac{9}{10}$$

$$179) \left(\frac{1}{3}n + 2\right)\left(1\frac{7}{10}n^2 + 3\frac{3}{4}n - 1\frac{1}{3}\right)$$

$$\frac{17}{30}n^3 + 4\frac{13}{20}n^2 + 7\frac{1}{18}n - 2\frac{2}{3}$$

$$181) \left(\frac{1}{6}m - 3\frac{7}{12}\right)\left(\frac{1}{2}m^2 + \frac{7}{12}m - 3\frac{8}{9}\right)$$

$$\frac{1}{12}m^3 - 1\frac{25}{36}m^2 - 2\frac{319}{432}m + 13\frac{101}{108}$$

$$183) \left(1\frac{2}{3}x + 1\frac{5}{12}\right)\left(\frac{1}{2}x^2 - 1\frac{1}{4}x - 1\frac{1}{5}\right)$$

$$\frac{5}{6}x^3 - 1\frac{3}{8}x^2 - 3\frac{37}{48}x - 1\frac{7}{10}$$

$$185) \left(6\frac{4}{5}n + \frac{1}{4}\right)\left(\frac{1}{2}n^2 + 1\frac{11}{12}n - \frac{5}{9}\right)$$

$$3\frac{2}{5}n^3 + 13\frac{19}{120}n^2 - 3\frac{43}{144}n - \frac{5}{36}$$

$$187) \left(6\frac{3}{7}a + 1\frac{5}{8}\right)\left(\frac{4}{7}a^2 - 7a - \frac{2}{3}\right)$$

$$3\frac{33}{49}a^3 - 44\frac{1}{14}a^2 - 15\frac{37}{56}a - 1\frac{1}{12}$$

$$189) \left(1\frac{3}{8}v + 2\frac{3}{5}\right)\left(1\frac{5}{9}v^2 + 1\frac{3}{5}v - 2\right)$$

$$2\frac{5}{36}v^3 + 6\frac{11}{45}v^2 + 1\frac{41}{100}v - 5\frac{1}{5}$$

$$191) \left(\frac{1}{2}n - \frac{1}{3}\right)\left(1\frac{3}{8}n^2 + 5\frac{3}{8}n + 2\right)$$

$$\frac{11}{16}n^3 + 2\frac{11}{48}n^2 - \frac{19}{24}n - \frac{2}{3}$$

$$193) \left(1\frac{1}{3}x - \frac{6}{11}\right)\left(4\frac{8}{9}x^2 + 5\frac{5}{7}x - 2\frac{1}{2}\right)$$

$$6\frac{14}{27}x^3 + 4\frac{20}{21}x^2 - 6\frac{104}{231}x + 1\frac{4}{11}$$

$$195) \left(3\frac{5}{12}x + 4\frac{7}{8}\right)\left(\frac{8}{11}x^2 + 6\frac{1}{4}x - 1\frac{3}{5}\right)$$

$$2\frac{16}{33}x^3 + 24\frac{475}{528}x^2 + 25\frac{1}{480}x - 7\frac{4}{5}$$

$$197) \left(\frac{1}{9}n - \frac{3}{4}\right)\left(1\frac{1}{9}n^2 + 2\frac{9}{11}n + 1\right)$$

$$\frac{10}{81}n^3 - \frac{103}{198}n^2 - 2\frac{1}{396}n - \frac{3}{4}$$

$$180) \left(\frac{2}{7}p + 1\frac{7}{10}\right)\left(1\frac{3}{5}p^2 - 1\frac{7}{12}p + 1\frac{1}{4}\right)$$

$$\frac{16}{35}p^3 + 2\frac{281}{1050}p^2 - 2\frac{281}{840}p + 2\frac{1}{8}$$

$$182) \left(\frac{1}{6}b - 1\frac{2}{9}\right)\left(\frac{7}{9}b^2 + 5\frac{4}{7}b - \frac{5}{6}\right)$$

$$\frac{7}{54}b^3 - \frac{25}{1134}b^2 - 6\frac{239}{252}b + 1\frac{1}{54}$$

$$184) \left(4\frac{1}{2}r + 1\frac{1}{3}\right)\left(6\frac{4}{11}r^2 + \frac{9}{11}r + \frac{1}{2}\right)$$

$$28\frac{7}{11}r^3 + 12\frac{1}{6}r^2 + 3\frac{15}{44}r + \frac{2}{3}$$

$$186) \left(1\frac{2}{5}x + 1\frac{2}{7}\right)\left(4\frac{1}{2}x^2 + 6\frac{1}{4}x + \frac{2}{3}\right)$$

$$6\frac{3}{10}x^3 + 14\frac{15}{28}x^2 + 8\frac{407}{420}x + \frac{6}{7}$$

$$188) \left(1\frac{7}{11}n - 1\frac{4}{5}\right)\left(1\frac{7}{9}n^2 - 3\frac{1}{4}n + 1\frac{5}{8}\right)$$

$$2\frac{10}{11}n^3 - 8\frac{57}{110}n^2 + 8\frac{28}{55}n - 2\frac{37}{40}$$

$$190) \left(\frac{1}{3}v + 1\frac{1}{2}\right)\left(6\frac{5}{12}v^2 + 1\frac{2}{3}v + 1\frac{5}{8}\right)$$

$$2\frac{5}{36}v^3 + 10\frac{13}{72}v^2 + 3\frac{1}{24}v + 2\frac{7}{16}$$

$$192) \left(3\frac{7}{10}x - \frac{1}{11}\right)\left(\frac{7}{9}x^2 + 5\frac{1}{2}x - 1\frac{1}{9}\right)$$

$$2\frac{79}{90}x^3 + 20\frac{553}{1980}x^2 - 4\frac{11}{18}x + \frac{10}{99}$$

$$194) \left(\frac{7}{10}k + 1\frac{1}{11}\right)\left(\frac{3}{10}k^2 - 1\frac{5}{7}k - 2\frac{1}{6}\right)$$

$$\frac{21}{100}k^3 - \frac{48}{55}k^2 - 3\frac{1787}{4620}k - 2\frac{4}{11}$$

$$196) \left(1\frac{3}{5}p + 1\right)\left(4\frac{4}{9}p^2 - 1\frac{9}{10}p + 1\frac{1}{7}\right)$$

$$7\frac{1}{9}p^3 + 1\frac{91}{225}p^2 - \frac{1}{14}p + 1\frac{1}{7}$$

$$198) \left(3\frac{4}{5}m - 10\right)\left(1\frac{3}{5}m^2 - 2\frac{1}{12}m - 3\frac{2}{9}\right)$$

$$6\frac{2}{25}m^3 - 23\frac{11}{12}m^2 + 8\frac{53}{90}m + 32\frac{2}{9}$$

$$199) \left(1\frac{5}{11}r - 5\right) \left(4\frac{3}{4}r^2 - 1\frac{1}{2}r - 2\frac{4}{9}\right)$$

$$6\frac{10}{11}r^3 - 25\frac{41}{44}r^2 + 3\frac{17}{18}r + 12\frac{2}{9}$$

$$201) \left(\frac{7}{10}b + \frac{10}{11}\right) \left(1\frac{11}{13}b^2 + \frac{3}{7}b + \frac{1}{20}\right)$$

$$1\frac{19}{65}b^3 + 1\frac{1399}{1430}b^2 + \frac{6539}{15400}b + \frac{1}{22}$$

$$203) \left(\frac{3}{8}x - 1\frac{5}{8}\right) \left(\frac{1}{6}x^2 + 8\frac{2}{3}x - \frac{7}{8}\right)$$

$$\frac{1}{16}x^3 + 2\frac{47}{48}x^2 - 14\frac{79}{192}x + 1\frac{27}{64}$$

$$205) \left(6\frac{2}{5}n + 17\frac{1}{10}\right) \left(1\frac{5}{13}n^2 + 2n - 3\frac{7}{10}\right)$$

$$8\frac{56}{65}n^3 + 36\frac{31}{65}n^2 + 10\frac{13}{25}n - 63\frac{27}{100}$$

$$207) \left(10\frac{5}{9}p + 5\frac{1}{7}\right) \left(1\frac{3}{19}p^2 + 2\frac{5}{7}p + \frac{1}{12}\right)$$

$$12\frac{2}{9}p^3 + 34\frac{725}{1197}p^2 + 14\frac{4439}{5292}p + \frac{3}{7}$$

$$209) \left(1\frac{7}{12}k - 11\right) \left(1\frac{3}{5}k^2 - 3\frac{1}{14}k + 4\frac{1}{7}\right)$$

$$2\frac{8}{15}k^3 - 22\frac{389}{840}k^2 + 40\frac{29}{84}k - 45\frac{4}{7}$$

$$211) \left(1\frac{12}{13}m - \frac{7}{11}\right) \left(11m^2 - 1\frac{1}{8}m - 2\right)$$

$$21\frac{2}{13}m^3 - 9\frac{17}{104}m^2 - 3\frac{149}{1144}m + 1\frac{3}{11}$$

$$213) \left(2\frac{7}{8}x + 9\frac{1}{11}\right) \left(5\frac{7}{8}x^2 + \frac{2}{3}x + 4\frac{1}{2}\right)$$

$$16\frac{57}{64}x^3 + 55\frac{43}{132}x^2 + 18\frac{527}{528}x + 40\frac{10}{11}$$

$$215) \left(9\frac{1}{12}v + \frac{1}{4}\right) \left(2\frac{5}{7}v^2 + 2v - 2\frac{9}{17}\right)$$

$$24\frac{55}{84}v^3 + 18\frac{71}{84}v^2 - 22\frac{97}{204}v - \frac{43}{68}$$

$$217) \left(\frac{1}{9}x - \frac{1}{4}\right) \left(1\frac{2}{9}x^2 - 2\frac{3}{5}x - 1\frac{2}{3}\right)$$

$$\frac{11}{81}x^3 - \frac{107}{180}x^2 + \frac{251}{540}x + \frac{5}{12}$$

$$200) \left(1\frac{1}{8}x - 2\frac{3}{10}\right) \left(\frac{2}{5}x^2 + 2\frac{1}{3}x - 3\frac{2}{3}\right)$$

$$\frac{9}{20}x^3 + 1\frac{141}{200}x^2 - 9\frac{59}{120}x + 8\frac{13}{30}$$

$$202) \left(2\frac{1}{4}n + 10\frac{7}{16}\right) \left(7\frac{1}{4}n^2 + 3\frac{1}{11}n + 2\frac{5}{6}\right)$$

$$16\frac{5}{16}n^3 + 82\frac{441}{704}n^2 + 38\frac{7}{11}n + 29\frac{55}{96}$$

$$204) \left(\frac{1}{11}v + 1\frac{12}{13}\right) \left(4\frac{3}{11}v^2 + 6\frac{3}{11}v + \frac{17}{20}\right)$$

$$\frac{47}{121}v^3 + 8\frac{1238}{1573}v^2 + 12\frac{401}{2860}v + 1\frac{33}{52}$$

$$206) \left(10\frac{4}{15}a - 1\right) \left(6\frac{9}{10}a^2 - \frac{4}{7}a + 3\frac{9}{10}\right)$$

$$70\frac{21}{25}a^3 - 12\frac{23}{30}a^2 + 40\frac{107}{175}a - 3\frac{9}{10}$$

$$208) \left(9\frac{5}{6}x + 2\frac{13}{15}\right) \left(9\frac{6}{17}x^2 - 2\frac{1}{2}x + 1\frac{1}{2}\right)$$

$$91\frac{33}{34}x^3 + 2\frac{233}{1020}x^2 + 7\frac{7}{12}x + 4\frac{3}{10}$$

$$210) \left(9\frac{7}{16}n - \frac{3}{4}\right) \left(10\frac{10}{13}n^2 + 2\frac{3}{8}n + 5\frac{9}{20}\right)$$

$$101\frac{33}{52}n^3 + 14\frac{561}{1664}n^2 + 49\frac{209}{320}n - 4\frac{7}{80}$$

$$212) \left(1\frac{3}{5}r + 1\frac{9}{10}\right) \left(8\frac{12}{17}r^2 - 1\frac{1}{9}r + 1\right)$$

$$13\frac{79}{85}r^3 + 14\frac{584}{765}r^2 - \frac{23}{45}r + 1\frac{9}{10}$$

$$214) \left(1\frac{13}{14}b - 1\frac{1}{6}\right) \left(1\frac{13}{16}b^2 + 6\frac{1}{4}b - 2\right)$$

$$3\frac{111}{224}b^3 + 9\frac{631}{672}b^2 - 11\frac{25}{168}b + 2\frac{1}{3}$$

$$216) \left(\frac{5}{17}n + 1\right) \left(4\frac{9}{10}n^2 - n + 1\frac{3}{8}\right)$$

$$1\frac{15}{34}n^3 + 4\frac{103}{170}n^2 - \frac{81}{136}n + 1\frac{3}{8}$$

$$218) \left(6\frac{13}{18}n - 1\frac{2}{3}\right) \left(4\frac{3}{14}n^2 + 10\frac{11}{14}n + 2\frac{1}{2}\right)$$

$$28\frac{83}{252}n^3 + 65\frac{121}{252}n^2 - 1\frac{43}{252}n - 4\frac{1}{6}$$

$$219) \left(\frac{1}{8}a + 3\frac{1}{20}\right)\left(\frac{3}{14}a^2 + 8\frac{1}{10}a + 1\frac{10}{11}\right)$$

$$\frac{3}{112}a^3 + 1\frac{373}{560}a^2 + 24\frac{519}{550}a + 5\frac{181}{220}$$

$$221) \left(4\frac{12}{13}v + 1\frac{2}{3}\right)\left(2v^2 + 1\frac{4}{7}v - 1\frac{4}{9}\right)$$

$$9\frac{11}{13}v^3 + 11\frac{19}{273}v^2 - 4\frac{31}{63}v - 2\frac{11}{27}$$

$$223) \left(2\frac{12}{17}n + 1\frac{4}{5}\right)\left(4n^2 + 8\frac{1}{2}n - \frac{9}{13}\right)$$

$$10\frac{14}{17}n^3 + 30\frac{1}{5}n^2 + 13\frac{943}{2210}n - 1\frac{16}{65}$$

$$225) \left(10\frac{1}{4}p + 10\frac{3}{7}\right)\left(1\frac{1}{8}p^2 + 1\frac{9}{20}p + \frac{1}{3}\right)$$

$$11\frac{17}{32}p^3 + 26\frac{333}{560}p^2 + 18\frac{113}{210}p + 3\frac{10}{21}$$

$$227) \left(\frac{13}{18}n + \frac{1}{16}\right)\left(1\frac{5}{12}n^2 - \frac{1}{2}n + 1\right)$$

$$1\frac{5}{216}n^3 - \frac{157}{576}n^2 + \frac{199}{288}n + \frac{1}{16}$$

$$229) \left(\frac{7}{15}m + 4\frac{3}{5}\right)\left(\frac{4}{13}m^2 + 8\frac{5}{7}m + 8\frac{3}{7}\right)$$

$$\frac{28}{195}m^3 + 5\frac{94}{195}m^2 + 44\frac{2}{105}m + 38\frac{27}{35}$$

$$231) \left(13n + 3\frac{7}{16}\right)\left(2\frac{5}{12}n^2 + 6\frac{1}{5}n - 1\frac{7}{9}\right)$$

$$31\frac{5}{12}n^3 + 88\frac{871}{960}n^2 - 1\frac{115}{144}n - 6\frac{1}{9}$$

$$233) \left(\frac{2}{7}v + 1\frac{3}{7}\right)\left(7\frac{2}{17}v^2 + 1\frac{7}{10}v + 8\frac{11}{18}\right)$$

$$2\frac{4}{119}v^3 + 10\frac{389}{595}v^2 + 4\frac{8}{9}v + 12\frac{19}{63}$$

$$235) \left(8\frac{1}{2}x - 14\right)\left(1\frac{3}{4}x^2 - \frac{1}{5}x - 1\frac{6}{11}\right)$$

$$14\frac{7}{8}x^3 - 26\frac{1}{5}x^2 - 10\frac{37}{110}x + 21\frac{7}{11}$$

$$237) \left(7\frac{1}{8}k + 4\frac{1}{12}\right)\left(1\frac{1}{2}k^2 + 1\frac{7}{15}k + 10\frac{1}{2}\right)$$

$$10\frac{11}{16}k^3 + 16\frac{23}{40}k^2 + 80\frac{577}{720}k + 42\frac{7}{8}$$

$$220) \left(4\frac{1}{3}x + 6\frac{13}{20}\right)\left(9\frac{5}{8}x^2 + 19\frac{1}{13}x + \frac{2}{3}\right)$$

$$41\frac{17}{24}x^3 + 146\frac{323}{480}x^2 + 129\frac{439}{585}x + 4\frac{13}{30}$$

$$222) \left(\frac{9}{20}x + 4\frac{1}{9}\right)\left(5\frac{3}{4}x^2 + 10\frac{7}{18}x - 1\frac{4}{15}\right)$$

$$2\frac{47}{80}x^3 + 28\frac{113}{360}x^2 + 42\frac{1133}{8100}x - 5\frac{28}{135}$$

$$224) \left(1\frac{1}{7}x + \frac{12}{13}\right)\left(4\frac{8}{15}x^2 - x - 3\frac{1}{16}\right)$$

$$5\frac{19}{105}x^3 + 3\frac{19}{455}x^2 - 4\frac{11}{26}x - 2\frac{43}{52}$$

$$226) \left(1\frac{1}{14}k - \frac{4}{7}\right)\left(\frac{5}{13}k^2 - k - 1\frac{3}{20}\right)$$

$$\frac{75}{182}k^3 - 1\frac{53}{182}k^2 - \frac{37}{56}k + \frac{23}{35}$$

$$228) \left(2r + 5\frac{8}{19}\right)\left(\frac{9}{13}r^2 - 2\frac{13}{18}r - 2\frac{15}{17}\right)$$

$$1\frac{5}{13}r^3 - 1\frac{1537}{2223}r^2 - 20\frac{3035}{5814}r - 15\frac{202}{323}$$

$$230) \left(\frac{2}{3}x - 1\frac{1}{2}\right)\left(1\frac{4}{11}x^2 + \frac{1}{2}x + 2\frac{4}{5}\right)$$

$$\frac{10}{11}x^3 - 1\frac{47}{66}x^2 + 1\frac{7}{60}x - 4\frac{1}{5}$$

$$232) \left(10\frac{11}{17}b + 3\frac{1}{18}\right)\left(\frac{7}{18}b^2 + \frac{8}{19}b - 2\frac{9}{14}\right)$$

$$4\frac{43}{306}b^3 + 5\frac{70247}{104652}b^2 - 26\frac{34679}{40698}b - 8\frac{19}{252}$$

$$234) \left(2x + 1\frac{1}{3}\right)\left(16x^2 + 1\frac{1}{6}x + 1\frac{11}{12}\right)$$

$$32x^3 + 23\frac{2}{3}x^2 + 5\frac{7}{18}x + 2\frac{5}{9}$$

$$236) \left(1\frac{5}{6}p + 4\frac{11}{20}\right)\left(1\frac{3}{17}p^2 + 10\frac{9}{10}p + 1\frac{2}{3}\right)$$

$$2\frac{8}{51}p^3 + 25\frac{343}{1020}p^2 + 52\frac{1171}{1800}p + 7\frac{7}{12}$$

$$238) \left(a + 6\frac{1}{3}\right)\left(\frac{1}{8}a^2 + \frac{2}{13}a + 6\right)$$

$$\frac{1}{8}a^3 + \frac{295}{312}a^2 + 6\frac{38}{39}a + 38$$

$$239) \left(6\frac{1}{3}x - 1\right)\left(x^2 + 1\frac{9}{13}x + \frac{9}{10}\right)$$

$$6\frac{1}{3}x^3 + 9\frac{28}{39}x^2 + 4\frac{1}{130}x - \frac{9}{10}$$

$$241) \left(4r + 3\frac{2}{3}\right)\left(16\frac{5}{17}r^2 + 12r + \frac{1}{2}\right)$$

$$65\frac{3}{17}r^3 + 107\frac{38}{51}r^2 + 46r + 1\frac{5}{6}$$

$$243) \left(\frac{4}{9}m + 1\frac{1}{4}\right)\left(2m^2 - 3\frac{2}{15}m + \frac{13}{15}\right)$$

$$\frac{8}{9}m^3 + 1\frac{29}{270}m^2 - 3\frac{287}{540}m + 1\frac{1}{12}$$

$$245) \left(1\frac{6}{11}b - 19\right)\left(\frac{2}{3}b^2 + 4\frac{7}{12}b + 10\frac{11}{12}\right)$$

$$1\frac{1}{33}b^3 - 5\frac{7}{12}b^2 - 70\frac{7}{33}b - 207\frac{5}{12}$$

$$247) \left(1\frac{7}{8}v + 1\frac{1}{3}\right)\left(\frac{12}{13}v^2 + \frac{2}{11}v - \frac{3}{5}\right)$$

$$1\frac{19}{26}v^3 + 1\frac{327}{572}v^2 - \frac{233}{264}v - \frac{4}{5}$$

$$249) \left(1\frac{11}{12}a + 1\frac{11}{18}\right)\left(9\frac{4}{11}a^2 - 2\frac{3}{4}a + 3\frac{7}{9}\right)$$

$$17\frac{125}{132}a^3 + 9\frac{1291}{1584}a^2 + 2\frac{175}{216}a + 6\frac{7}{81}$$

$$251) \left(\frac{4}{7}x + 1\frac{2}{5}\right)\left(5\frac{1}{6}x^2 - 1\frac{1}{4}x - 3\frac{9}{10}\right)$$

$$2\frac{20}{21}x^3 + 6\frac{109}{210}x^2 - 3\frac{137}{140}x - 5\frac{23}{50}$$

$$253) \left(10\frac{6}{11}k - \frac{4}{5}\right)\left(1\frac{3}{4}k^2 - 2k + 1\frac{3}{4}\right)$$

$$18\frac{5}{11}k^3 - 22\frac{27}{55}k^2 + 20\frac{3}{55}k - 1\frac{2}{5}$$

$$255) \left(3\frac{1}{20}p - 1\frac{10}{11}\right)\left(8\frac{2}{3}p^2 + 8\frac{3}{7}p + \frac{2}{7}\right)$$

$$26\frac{13}{30}p^3 + 9\frac{249}{1540}p^2 - 15\frac{169}{770}p - \frac{6}{11}$$

$$257) \left(1\frac{5}{6}m + \frac{7}{18}\right)\left(5\frac{2}{15}m^2 + \frac{5}{13}m - \frac{7}{11}\right)$$

$$9\frac{37}{90}m^3 + 2\frac{1231}{1755}m^2 - 1\frac{2}{117}m - \frac{49}{198}$$

$$240) \left(9\frac{7}{12}n + 9\frac{4}{15}\right)\left(1\frac{9}{14}n^2 + 10\frac{7}{8}n + 8\frac{5}{12}\right)$$

$$15\frac{125}{168}n^3 + 119\frac{1487}{3360}n^2 + 181\frac{313}{720}n + 77\frac{179}{180}$$

$$242) \left(2x + 7\frac{1}{14}\right)\left(6\frac{5}{9}x^2 + 4\frac{7}{18}x + \frac{1}{4}\right)$$

$$13\frac{1}{9}x^3 + 55\frac{17}{126}x^2 + 31\frac{15}{28}x + 1\frac{43}{56}$$

$$244) \left(4\frac{10}{13}n + 8\frac{5}{16}\right)\left(3\frac{1}{2}n^2 + 1\frac{3}{5}n - \frac{1}{3}\right)$$

$$16\frac{9}{13}n^3 + 36\frac{1507}{2080}n^2 + 11\frac{277}{390}n - 2\frac{37}{48}$$

$$246) \left(2\frac{2}{5}x + 4\frac{1}{2}\right)\left(5x^2 - 2\frac{1}{2}x - 1\frac{1}{6}\right)$$

$$12x^3 + 16\frac{1}{2}x^2 - 14\frac{1}{20}x - 5\frac{1}{4}$$

$$248) \left(\frac{4}{15}n + 10\frac{17}{19}\right)\left(1\frac{1}{7}n^2 + 5\frac{2}{5}n - \frac{7}{18}\right)$$

$$\frac{32}{105}n^3 + 13\frac{2963}{3325}n^2 + 58\frac{1867}{2565}n - 4\frac{9}{38}$$

$$250) \left(2\frac{2}{9}k + \frac{1}{6}\right)\left(\frac{1}{2}k^2 + 2k + 1\frac{12}{13}\right)$$

$$1\frac{1}{9}k^3 + 4\frac{19}{36}k^2 + 4\frac{71}{117}k + \frac{25}{78}$$

$$252) \left(15n - \frac{1}{3}\right)\left(10\frac{1}{3}n^2 - n - \frac{9}{13}\right)$$

$$155n^3 - 18\frac{4}{9}n^2 - 10\frac{2}{39}n + \frac{3}{13}$$

$$254) \left(1\frac{5}{16}x - 20\frac{11}{15}\right)\left(1\frac{6}{19}x^2 - x + 6\frac{5}{18}\right)$$

$$1\frac{221}{304}x^3 - 28\frac{541}{912}x^2 + 28\frac{467}{480}x - 130\frac{43}{270}$$

$$256) \left(1\frac{8}{17}x - 1\frac{1}{2}\right)\left(1\frac{11}{17}x^2 - 1\frac{7}{13}x - 1\right)$$

$$2\frac{122}{289}x^3 - 4\frac{162}{221}x^2 + \frac{185}{221}x + 1\frac{1}{2}$$

$$258) \left(5\frac{1}{2}r + 1\frac{1}{18}\right)\left(3\frac{7}{8}r^2 + 10\frac{4}{7}r + \frac{2}{5}\right)$$

$$21\frac{5}{16}r^3 + 62\frac{235}{1008}r^2 + 13\frac{113}{315}r + \frac{19}{45}$$

$$259) \left(8\frac{4}{15}n - 3\frac{3}{20}\right)\left(3\frac{9}{10}n^2 + n - 13\right)$$

$$32\frac{6}{25}n^3 - 4\frac{11}{600}n^2 - 110\frac{37}{60}n + 40\frac{19}{20}$$

$$261) \left(1\frac{7}{8}n + 1\frac{1}{15}\right)\left(1\frac{8}{9}n^2 + \frac{4}{9}n + 3\frac{9}{16}\right)$$

$$3\frac{13}{24}n^3 + 2\frac{229}{270}n^2 + 7\frac{2657}{17280}n + 3\frac{4}{5}$$

$$263) \left(16v + 6\frac{11}{19}\right)\left(\frac{1}{6}v^2 - \frac{5}{6}v - 4\frac{2}{7}\right)$$

$$2\frac{2}{3}v^3 - 12\frac{9}{38}v^2 - 74\frac{43}{798}v - 28\frac{26}{133}$$

$$265) \left(5\frac{1}{14}a + 1\frac{3}{10}\right)\left(16a^2 + 1\frac{2}{7}a + 1\frac{1}{3}\right)$$

$$81\frac{1}{7}a^3 + 27\frac{157}{490}a^2 + 8\frac{13}{30}a + 1\frac{11}{15}$$

$$267) \left(4\frac{1}{5}k + 10\frac{5}{18}\right)\left(7\frac{15}{19}k^2 + 2k + 2\frac{4}{5}\right)$$

$$32\frac{68}{95}k^3 + 88\frac{392}{855}k^2 + 32\frac{71}{225}k + 28\frac{7}{9}$$

$$269) \left(2\frac{13}{18}x - 1\frac{1}{12}\right)\left(\frac{2}{5}x^2 - \frac{4}{19}x + 9\frac{2}{19}\right)$$

$$1\frac{4}{45}x^3 - 1\frac{11}{1710}x^2 + 25\frac{5}{342}x - 9\frac{197}{228}$$

$$271) \left(\frac{5}{6}m + \frac{9}{20}\right)\left(5\frac{1}{8}m^2 - 1\frac{1}{2}m - \frac{7}{10}\right)$$

$$4\frac{13}{48}m^3 + 1\frac{9}{160}m^2 - 1\frac{31}{120}m - \frac{63}{200}$$

$$273) \left(7\frac{1}{10}n + 1\frac{11}{18}\right)\left(1\frac{3}{7}n^2 + 10\frac{13}{14}n + 1\right)$$

$$10\frac{1}{7}n^3 + 79\frac{161}{180}n^2 + 24\frac{99}{140}n + 1\frac{11}{18}$$

$$275) \left(1\frac{1}{3}r + 1\frac{1}{13}\right)\left(6\frac{4}{7}r^2 - 1\frac{1}{6}r - 7\right)$$

$$8\frac{16}{21}r^3 + 5\frac{61}{117}r^2 - 10\frac{23}{39}r - 7\frac{7}{13}$$

$$277) \left(\frac{3}{4}v + \frac{5}{19}\right)\left(9\frac{9}{11}v^2 + \frac{10}{19}v + 8\frac{2}{9}\right)$$

$$7\frac{4}{11}v^3 + 2\frac{409}{418}v^2 + 6\frac{661}{2166}v + 2\frac{28}{171}$$

$$260) \left(\frac{1}{6}x - 1\frac{13}{16}\right)\left(17\frac{2}{3}x^2 + 5\frac{1}{15}x + \frac{1}{7}\right)$$

$$2\frac{17}{18}x^3 - 31\frac{127}{720}x^2 - 9\frac{67}{420}x - \frac{29}{112}$$

$$262) \left(7\frac{4}{13}b + \frac{2}{5}\right)\left(9\frac{6}{7}b^2 + 2\frac{5}{18}b + \frac{10}{11}\right)$$

$$72\frac{3}{91}b^3 + 20\frac{4817}{8190}b^2 + 7\frac{3568}{6435}b + \frac{4}{11}$$

$$264) \left(10\frac{1}{2}x - \frac{3}{11}\right)\left(5\frac{17}{18}x^2 + 1\frac{15}{17}x + 6\frac{7}{9}\right)$$

$$62\frac{5}{12}x^3 + 18\frac{161}{1122}x^2 + 70\frac{733}{1122}x - 1\frac{28}{33}$$

$$266) \left(1\frac{9}{17}x + \frac{8}{9}\right)\left(\frac{3}{5}x^2 - 1\frac{2}{5}x - 14\right)$$

$$\frac{78}{85}x^3 - 1\frac{31}{51}x^2 - 22\frac{502}{765}x - 12\frac{4}{9}$$

$$268) \left(2p - 3\frac{13}{18}\right)\left(1\frac{7}{13}p^2 + \frac{11}{13}p + 1\frac{1}{16}\right)$$

$$3\frac{1}{13}p^3 - 4\frac{4}{117}p^2 - 1\frac{23}{936}p - 3\frac{275}{288}$$

$$270) \left(\frac{1}{3}n - 2\right)\left(\frac{3}{7}n^2 + 6\frac{1}{2}n + 7\frac{4}{15}\right)$$

$$\frac{1}{7}n^3 + 1\frac{13}{42}n^2 - 10\frac{26}{45}n - 14\frac{8}{15}$$

$$272) \left(\frac{1}{4}x - 1\frac{6}{11}\right)\left(1\frac{1}{6}x^2 + 9\frac{1}{2}x + 2\right)$$

$$\frac{7}{24}x^3 + \frac{151}{264}x^2 - 14\frac{2}{11}x - 3\frac{1}{11}$$

$$274) \left(\frac{6}{7}b + 6\frac{7}{9}\right)\left(\frac{10}{11}b^2 - 1\frac{3}{8}b - 1\frac{3}{4}\right)$$

$$\frac{60}{77}b^3 + 4\frac{2725}{2772}b^2 - 10\frac{59}{72}b - 11\frac{31}{36}$$

$$276) \left(10\frac{10}{11}n + 4\frac{1}{16}\right)\left(8\frac{5}{16}n^2 + 6\frac{8}{9}n - \frac{5}{6}\right)$$

$$90\frac{15}{22}n^3 + 108\frac{7781}{8448}n^2 + 18\frac{709}{792}n - 3\frac{37}{96}$$

$$278) \left(1\frac{1}{2}x + 1\right)\left(3\frac{7}{11}x^2 + \frac{3}{4}x + \frac{1}{2}\right)$$

$$5\frac{5}{11}x^3 + 4\frac{67}{88}x^2 + 1\frac{1}{2}x + \frac{1}{2}$$

$$279) \left(7\frac{1}{8}a - 4\frac{3}{4}\right)\left(\frac{3}{7}a^2 - 1\frac{3}{5}a + 4\frac{2}{3}\right)$$

$$3\frac{3}{56}a^3 - 13\frac{61}{140}a^2 + 40\frac{17}{20}a - 22\frac{1}{6}$$

$$281) \left(9\frac{1}{3}x + 3\frac{4}{13}\right)\left(1\frac{1}{3}x^2 - \frac{3}{4}x + \frac{15}{16}\right)$$

$$12\frac{4}{9}x^3 - 2\frac{23}{39}x^2 + 6\frac{7}{26}x + 3\frac{21}{208}$$

$$283) \left(\frac{7}{10}n + 5\right)\left(\frac{1}{2}n^2 - 1\frac{9}{10}n - 2\frac{4}{5}\right)$$

$$\frac{7}{20}n^3 + 1\frac{17}{100}n^2 - 11\frac{23}{50}n - 14$$

$$285) \left(18p - \frac{10}{11}\right)\left(2\frac{1}{20}p^2 - \frac{3}{4}p + 5\frac{6}{17}\right)$$

$$36\frac{9}{10}p^3 - 15\frac{4}{11}p^2 + 97\frac{13}{374}p - 4\frac{162}{187}$$

$$287) \left(\frac{7}{11}n - \frac{2}{5}\right)\left(\frac{2}{7}n^2 + 1\frac{1}{2}n + 7\frac{8}{9}\right)$$

$$\frac{2}{11}n^3 + \frac{647}{770}n^2 + 4\frac{208}{495}n - 3\frac{7}{45}$$

$$289) \left(5\frac{1}{18}r + 1\frac{12}{13}\right)\left(1\frac{5}{6}r^2 + 7\frac{1}{8}r - \frac{19}{20}\right)$$

$$9\frac{29}{108}r^3 + 39\frac{341}{624}r^2 + 8\frac{526}{585}r - 1\frac{43}{52}$$

$$291) \left(4\frac{5}{12}n + 4\frac{1}{3}\right)\left(9n^2 + 20n - 1\frac{17}{18}\right)$$

$$39\frac{3}{4}n^3 + 127\frac{1}{3}n^2 + 78\frac{17}{216}n - 8\frac{23}{54}$$

$$293) \left(1\frac{5}{9}b - 3\frac{7}{11}\right)\left(7\frac{11}{12}b^2 + 2\frac{5}{13}b + 9\frac{13}{18}\right)$$

$$12\frac{17}{54}b^3 - 25\frac{101}{1287}b^2 + 6\frac{5237}{11583}b - 35\frac{35}{99}$$

$$295) \left(1\frac{4}{13}x + 1\frac{3}{7}\right)\left(\frac{10}{11}x^2 + 10\frac{8}{19}x + \frac{1}{5}\right)$$

$$1\frac{27}{143}x^3 + 14\frac{17616}{19019}x^2 + 15\frac{1286}{8645}x + 2\frac{2}{7}$$

$$297) \left(\frac{19}{20}k - 1\frac{2}{5}\right)\left(\frac{6}{13}k^2 - 1\frac{3}{5}k - 1\frac{5}{9}\right)$$

$$\frac{57}{130}k^3 - 2\frac{54}{325}k^2 + \frac{343}{450}k + 2\frac{8}{45}$$

$$280) \left(\frac{1}{2}k + 1\frac{3}{7}\right)\left(\frac{4}{5}k^2 - 1\frac{4}{5}k + 6\frac{9}{13}\right)$$

$$\frac{2}{5}k^3 + \frac{17}{70}k^2 + \frac{141}{182}k + 9\frac{51}{91}$$

$$282) \left(9\frac{11}{12}x + \frac{1}{2}\right)\left(\frac{1}{2}x^2 + 6\frac{10}{13}x + 7\frac{2}{19}\right)$$

$$4\frac{23}{24}x^3 + 67\frac{59}{156}x^2 + 73\frac{835}{988}x + 3\frac{21}{38}$$

$$284) \left(k + 1\frac{2}{9}\right)\left(1\frac{13}{15}k^2 - \frac{1}{10}k + 3\frac{1}{4}\right)$$

$$1\frac{13}{15}k^3 + 2\frac{49}{270}k^2 + 3\frac{23}{180}k + 3\frac{35}{36}$$

$$286) \left(5\frac{11}{14}x - 2\right)\left(20x^2 - 1\frac{4}{15}x - 1\frac{4}{13}\right)$$

$$115\frac{5}{7}x^3 - 47\frac{23}{70}x^2 - 5\frac{89}{2730}x + 2\frac{8}{13}$$

$$288) \left(6\frac{5}{8}m + 4\frac{17}{20}\right)\left(1\frac{8}{13}m^2 - 1\frac{4}{5}m + 7\frac{7}{10}\right)$$

$$10\frac{73}{104}m^3 - 4\frac{47}{520}m^2 + 42\frac{113}{400}m + 37\frac{69}{200}$$

$$290) \left(\frac{1}{5}x - 1\frac{1}{14}\right)\left(6\frac{5}{13}x^2 - \frac{7}{10}x - 1\frac{8}{15}\right)$$

$$1\frac{18}{65}x^3 - 6\frac{2231}{2275}x^2 + \frac{133}{300}x + 1\frac{9}{14}$$

$$292) \left(4\frac{14}{19}v + 1\frac{12}{19}\right)\left(1\frac{2}{3}v^2 + 7\frac{2}{3}v - \frac{8}{15}\right)$$

$$7\frac{17}{19}v^3 + 39\frac{2}{57}v^2 + 9\frac{56}{57}v - \frac{248}{285}$$

$$294) \left(1\frac{11}{16}x - \frac{8}{9}\right)\left(\frac{6}{19}x^2 - 3\frac{11}{12}x + 6\frac{1}{16}\right)$$

$$\frac{81}{152}x^3 - 6\frac{3247}{3648}x^2 + 13\frac{4921}{6912}x - 5\frac{7}{18}$$

$$296) \left(2\frac{4}{11}a + 1\right)\left(10\frac{1}{10}a^2 + 6\frac{12}{19}a - 3\frac{6}{19}\right)$$

$$23\frac{48}{55}a^3 + 25\frac{1619}{2090}a^2 - 1\frac{43}{209}a - 3\frac{6}{19}$$

$$298) \left(1\frac{5}{17}p - 2\frac{10}{13}\right)\left(\frac{7}{9}p^2 + 8\frac{6}{19}p + \frac{1}{14}\right)$$

$$1\frac{1}{153}p^3 + 8\frac{2552}{4199}p^2 - 22\frac{27509}{29393}p - \frac{18}{91}$$

$$299) \left(1\frac{1}{3}x - \frac{1}{2}\right) \left(10\frac{3}{11}x^2 + \frac{1}{2}x - 3\frac{3}{13}\right)$$

$$13\frac{23}{33}x^3 - 4\frac{31}{66}x^2 - 4\frac{29}{52}x + 1\frac{8}{13}$$

$$301) \left(10\frac{10}{21}x + 2\right) \left(6\frac{1}{7}x^2 + 7\frac{11}{28}x - 1\frac{28}{31}\right)$$

$$64\frac{52}{147}x^3 + 89\frac{36}{49}x^2 - 5\frac{199}{1302}x - 3\frac{25}{31}$$

$$303) \left(7\frac{23}{35}m + 2\frac{22}{37}\right) \left(1\frac{1}{2}m^2 + 21\frac{1}{6}m + 1\frac{17}{24}\right)$$

$$11\frac{17}{35}m^3 + 165\frac{3761}{3885}m^2 + 67\frac{7769}{7770}m + 4\frac{16}{37}$$

$$305) \left(20\frac{19}{43}b + 6\frac{1}{30}\right) \left(5\frac{31}{39}b^2 + \frac{6}{11}b + 1\frac{12}{23}\right)$$

$$118\frac{256}{559}b^3 + 46\frac{31129}{276705}b^2 + 34\frac{21654}{54395}b + 9\frac{25}{138}$$

$$307) \left(1\frac{3}{11}v - \frac{26}{43}\right) \left(\frac{7}{11}v^2 - 21v - \frac{14}{15}\right)$$

$$\frac{98}{121}v^3 - 27\frac{53}{473}v^2 + 11\frac{3617}{7095}v + \frac{364}{645}$$

$$309) \left(1\frac{31}{50}a - \frac{3}{4}\right) \left(\frac{1}{9}a^2 + 1\frac{9}{17}a + 1\frac{15}{23}\right)$$

$$\frac{9}{50}a^3 + 2\frac{2011}{5100}a^2 + 1\frac{10351}{19550}a - 1\frac{11}{46}$$

$$311) \left(9\frac{7}{18}k + \frac{7}{48}\right) \left(1\frac{31}{48}k^2 + 2k + 1\frac{3}{4}\right)$$

$$15\frac{391}{864}k^3 + 19\frac{41}{2304}k^2 + 16\frac{13}{18}k + \frac{49}{192}$$

$$313) \left(2\frac{3}{8}n + 1\frac{7}{11}\right) \left(\frac{22}{43}n^2 + \frac{6}{7}n - \frac{7}{8}\right)$$

$$1\frac{37}{172}n^3 + 2\frac{1051}{1204}n^2 - \frac{3329}{4928}n - 1\frac{19}{44}$$

$$315) \left(7\frac{21}{47}x - \frac{21}{22}\right) \left(\frac{13}{14}x^2 + x + \frac{1}{3}\right)$$

$$6\frac{43}{47}x^3 + 6\frac{1159}{2068}x^2 + 1\frac{1637}{3102}x - \frac{7}{22}$$

$$317) \left(19\frac{2}{15}n + 17\frac{4}{7}\right) \left(19\frac{19}{29}n^2 - 2n - 1\right)$$

$$376\frac{2}{29}n^3 + 307\frac{313}{3045}n^2 - 54\frac{29}{105}n - 17\frac{4}{7}$$

$$300) \left(4\frac{11}{12}n + 7\frac{5}{6}\right) \left(1\frac{11}{12}n^2 + \frac{7}{16}n - 20\frac{3}{11}\right)$$

$$9\frac{61}{144}n^3 + 17\frac{95}{576}n^2 - 96\frac{87}{352}n - 158\frac{53}{66}$$

$$302) \left(1\frac{3}{4}r + 15\frac{32}{41}\right) \left(26r^2 + 6\frac{11}{27}r - 2\frac{3}{4}\right)$$

$$45\frac{1}{2}r^3 + 421\frac{2239}{4428}r^2 + 96\frac{5305}{17712}r - 43\frac{65}{164}$$

$$304) \left(1\frac{4}{5}n + 1\frac{17}{18}\right) \left(20\frac{5}{8}n^2 + 21\frac{30}{47}n + 4\frac{18}{31}\right)$$

$$37\frac{1}{8}n^3 + 79\frac{599}{11280}n^2 + 50\frac{4657}{14570}n + 8\frac{253}{279}$$

$$306) \left(\frac{3}{7}x + \frac{4}{7}\right) \left(1\frac{9}{10}x^2 - \frac{1}{7}x + \frac{1}{7}\right)$$

$$\frac{57}{70}x^3 + 1\frac{6}{245}x^2 - \frac{1}{49}x + \frac{4}{49}$$

$$308) \left(19\frac{1}{33}n + 7\frac{15}{16}\right) \left(19\frac{18}{35}n^2 + 15\frac{13}{36}n + 1\frac{3}{16}\right)$$

$$371\frac{419}{1155}n^3 + 447\frac{36797}{166320}n^2 + 144\frac{3341}{6336}n + 9\frac{109}{256}$$

$$310) \left(1\frac{18}{35}x + 14\frac{1}{45}\right) \left(9\frac{3}{10}x^2 + 1\frac{24}{29}x - 3\frac{15}{46}\right)$$

$$14\frac{29}{350}x^3 + 133\frac{5303}{30450}x^2 + 20\frac{247997}{420210}x - 46\frac{147}{230}$$

$$312) \left(20\frac{7}{40}x + \frac{1}{2}\right) \left(24\frac{18}{29}x^2 - 2\frac{13}{14}x + 2\frac{21}{44}\right)$$

$$496\frac{419}{580}x^3 - 46\frac{12563}{16240}x^2 + 48\frac{6341}{12320}x + 1\frac{21}{88}$$

$$314) \left(15\frac{31}{43}p + 1\frac{7}{18}\right) \left(11\frac{7}{44}p^2 - \frac{4}{21}p + 1\frac{3}{5}\right)$$

$$175\frac{204}{473}p^3 + 12\frac{120215}{238392}p^2 + 24\frac{36122}{40635}p + 2\frac{2}{9}$$

$$316) \left(\frac{18}{25}m + 9\frac{13}{34}\right) \left(m^2 - \frac{35}{39}m + 7\frac{23}{45}\right)$$

$$\frac{18}{25}m^3 + 8\frac{1627}{2210}m^2 - 3\frac{1999}{165750}m + 70\frac{361}{765}$$

$$318) \left(1\frac{10}{33}m + 9\frac{19}{36}\right) \left(\frac{20}{21}m^2 + \frac{3}{5}m + 19\frac{1}{15}\right)$$

$$1\frac{167}{693}m^3 + 9\frac{1271}{1485}m^2 + 30\frac{101}{180}m + 181\frac{179}{270}$$

319)  $\left(1\frac{10}{37}r + \frac{33}{49}\right)\left(23\frac{28}{45}r^2 - 1\frac{11}{36}r + 1\frac{6}{7}\right)$   
 $30\frac{11}{1665}r^3 + 14\frac{81727}{326340}r^2 + 1\frac{10439}{21756}r + 1\frac{86}{343}$   
 320)  $\left(1\frac{19}{23}n + 18\frac{9}{25}\right)\left(25\frac{23}{38}n^2 - 2n + 19\frac{5}{41}\right)$   
 $46\frac{331}{437}n^3 + 466\frac{10061}{21850}n^2 - 1\frac{18899}{23575}n + 351\frac{81}{1025}$

321)  $\left(\frac{19}{40}b - 1\frac{18}{25}\right)\left(\frac{17}{30}b^2 - \frac{20}{23}b + 45\right)$   
 $\frac{323}{1200}b^3 - 1\frac{3344}{8625}b^2 + 22\frac{801}{920}b - 77\frac{2}{5}$   
 322)  $\left(3\frac{2}{5}x - \frac{19}{37}\right)\left(\frac{4}{5}x^2 + 5\frac{22}{37}x + \frac{26}{45}\right)$   
 $2\frac{18}{25}x^3 + 18\frac{113}{185}x^2 - \frac{279827}{308025}x - \frac{494}{1665}$

323)  $\left(3\frac{39}{44}v + 19\frac{17}{38}\right)\left(1\frac{5}{23}v^2 + 7\frac{19}{32}v + 1\frac{8}{13}\right)$   
 $4\frac{185}{253}v^3 + 53\frac{115141}{615296}v^2 + 153\frac{166311}{173888}v + 31\frac{205}{494}$   
 324)  $\left(9\frac{29}{30}x + 1\right)\left(\frac{1}{2}x^2 - 31x + 2\right)$   
 $4\frac{59}{60}x^3 - 308\frac{7}{15}x^2 - 11\frac{1}{15}x + 2$

325)  $\left(\frac{11}{47}a + 1\frac{17}{27}\right)\left(\frac{4}{5}a^2 + 19\frac{15}{17}a - \frac{19}{24}\right)$   
 $\frac{44}{235}a^3 + 5\frac{103229}{107865}a^2 + 32\frac{37207}{172584}a - 1\frac{47}{162}$   
 326)  $\left(1\frac{3}{13}x + 9\frac{29}{50}\right)\left(18\frac{16}{17}x^2 + 23\frac{37}{40}x - 1\frac{9}{10}\right)$   
 $23\frac{69}{221}x^3 + 210\frac{4987}{5525}x^2 + 226\frac{22439}{26000}x - 18\frac{101}{500}$

327)  $\left(22\frac{1}{2}k + 1\frac{1}{3}\right)\left(1\frac{1}{32}k^2 + 11k - \frac{13}{19}\right)$   
 $23\frac{13}{64}k^3 + 248\frac{7}{8}k^2 - \frac{83}{114}k - \frac{52}{57}$   
 328)  $\left(13\frac{11}{20}p + 11\frac{12}{35}\right)\left(1\frac{8}{27}p^2 - 1\frac{35}{36}p - \frac{4}{9}\right)$   
 $17\frac{61}{108}p^3 - 12\frac{43}{2160}p^2 - 28\frac{11}{28}p - 5\frac{13}{315}$

329)  $\left(\frac{5}{37}x + 23\right)\left(5\frac{41}{45}x^2 + 49x - 2\right)$   
 $\frac{266}{333}x^3 + 142\frac{961}{1665}x^2 + 1126\frac{27}{37}x - 46$   
 330)  $\left(24\frac{4}{5}n - 1\frac{13}{25}\right)\left(24\frac{9}{11}n^2 + 1\frac{3}{11}n - 1\frac{19}{49}\right)$   
 $615\frac{27}{55}n^3 - 6\frac{4}{25}n^2 - 36\frac{4728}{13475}n + 2\frac{134}{1225}$

331)  $\left(\frac{3}{5}m + 18\frac{29}{41}\right)\left(2\frac{34}{45}m^2 + 8\frac{19}{40}m + 14\frac{20}{41}\right)$   
 $1\frac{49}{75}m^3 + 56\frac{46793}{73800}m^2 + 167\frac{389}{1640}m + 271\frac{47}{1681}$   
 332)  $\left(9\frac{19}{27}r + 23\frac{13}{28}\right)\left(3\frac{15}{26}r^2 - 1\frac{9}{19}r + 23\frac{7}{11}\right)$   
 $34\frac{83}{117}r^3 + 69\frac{235189}{373464}r^2 + 194\frac{4409}{5643}r - 490\frac{64271}{73359}$

333)  $\left(\frac{7}{44}x + 23\frac{4}{5}\right)\left(20\frac{1}{26}x^2 - 1\frac{1}{18}x + 17\frac{14}{33}\right)$   
 $3\frac{215}{1144}x^3 + 476\frac{38479}{51480}x^2 - 22\frac{7627}{21780}x + 414\frac{23}{33}$   
 334)  $\left(4\frac{12}{17}b - \frac{5}{11}\right)\left(20\frac{3}{8}b^2 - 2b + 23\frac{1}{2}\right)$   
 $95\frac{15}{17}b^3 - 18\frac{1007}{1496}b^2 + 111\frac{93}{187}b - 10\frac{15}{22}$

335)  $\left(\frac{30}{49}n + 18\frac{11}{18}\right)\left(15\frac{35}{38}n^2 + 13\frac{45}{47}n - 1\frac{17}{18}\right)$   
 $9\frac{696}{931}n^3 + 1\frac{12850241}{14177268}n^2 - 44\frac{1326781}{3544317}n - 36\frac{61}{324}$   
 336)  $\left(\frac{7}{34}v - \frac{5}{43}\right)\left(4\frac{1}{10}v^2 + 13\frac{1}{4}v + \frac{4}{35}\right)$   
 $\frac{287}{340}v^3 + 2\frac{1469}{5848}v^2 - 1\frac{7561}{14620}v - \frac{4}{301}$

337)  $\left(1\frac{1}{7}n + 1\frac{15}{19}\right)\left(9\frac{36}{49}n^2 - 1\frac{6}{35}n + 25\frac{9}{10}\right)$   
 $11\frac{43}{343}n^3 + 16\frac{54}{665}n^2 + 27\frac{67}{133}n + 46\frac{33}{95}$   
 338)  $\left(15\frac{2}{3}x + 14\frac{35}{47}\right)\left(20\frac{5}{8}x^2 + 23x + 4\frac{16}{25}\right)$   
 $323\frac{1}{8}x^3 + 664\frac{499}{1128}x^2 + 411\frac{2894}{3525}x + 68\frac{488}{1175}$

$$339) \left(\frac{4}{5}x + 18\frac{8}{9}\right)\left(1\frac{1}{2}x^2 - 39x + 2\frac{13}{14}\right)$$

$$1\frac{1}{5}x^3 - 2\frac{13}{15}x^2 - 734\frac{34}{105}x + 55\frac{20}{63}$$

$$341) \left(16\frac{19}{24}a - 36\frac{17}{20}\right)\left(1\frac{6}{23}a^2 + 7\frac{1}{6}a + 6\frac{15}{37}\right)$$

$$21\frac{95}{552}a^3 + 73\frac{14527}{16560}a^2 - 156\frac{593}{1110}a - 236\frac{29}{740}$$

$$343) \left(22\frac{25}{42}k + 1\frac{11}{36}\right)\left(12\frac{8}{21}k^2 + 12k + 9\frac{19}{48}\right)$$

$$279\frac{331}{441}k^3 + 287\frac{58}{189}k^2 + 227\frac{1951}{2016}k + 12\frac{461}{1728}$$

$$345) \left(14\frac{12}{49}m + 20\frac{16}{19}\right)\left(m^2 + \frac{5}{11}m + 1\frac{3}{4}\right)$$

$$14\frac{12}{49}m^3 + 27\frac{3247}{10241}m^2 + 34\frac{107}{266}m + 36\frac{9}{19}$$

$$347) \left(9\frac{7}{39}n + 2\frac{24}{35}\right)\left(8\frac{3}{7}n^2 - \frac{22}{41}n - \frac{3}{5}\right)$$

$$77\frac{101}{273}n^3 + 17\frac{278599}{391755}n^2 - 6\frac{3540}{3731}n - 1\frac{107}{175}$$

$$349) \left(1\frac{1}{11}r - 1\frac{7}{8}\right)\left(19\frac{26}{43}r^2 + 11\frac{13}{48}r - 46\right)$$

$$21\frac{183}{473}r^3 - 24\frac{1753}{3784}r^2 - 71\frac{443}{1408}r + 86\frac{1}{4}$$

$$351) \left(\frac{2}{7}b + \frac{12}{19}\right)\left(1\frac{11}{28}b^2 + 1\frac{31}{42}b + 22\frac{25}{39}\right)$$

$$\frac{39}{98}b^3 + 1\frac{1051}{2793}b^2 + 7\frac{2939}{5187}b + 14\frac{74}{247}$$

$$353) \left(\frac{7}{19}v + \frac{49}{50}\right)\left(25v^2 - 1\frac{7}{17}v + 6\frac{5}{19}\right)$$

$$9\frac{4}{19}v^3 + 23\frac{633}{646}v^2 + \frac{141757}{153425}v + 6\frac{131}{950}$$

$$355) \left(9\frac{25}{36}x + 8\frac{1}{7}\right)\left(1\frac{10}{39}x^2 + 20\frac{5}{12}x + 1\frac{32}{35}\right)$$

$$12\frac{253}{1404}x^3 + 208\frac{893}{5616}x^2 + 184\frac{509}{630}x + 15\frac{144}{245}$$

$$357) \left(4\frac{11}{26}k + 18\frac{9}{23}\right)\left(1\frac{5}{14}k^2 - k + 14\frac{11}{38}\right)$$

$$6\frac{1}{364}k^3 + 20\frac{1123}{2093}k^2 + 44\frac{18455}{22724}k + 262\frac{701}{874}$$

$$340) \left(3\frac{11}{14}x + 1\frac{3}{8}\right)\left(14\frac{31}{48}x^2 + 3\frac{22}{23}x + 2\frac{17}{18}\right)$$

$$55\frac{299}{672}x^3 + 35\frac{1027}{8832}x^2 + 16\frac{6805}{11592}x + 4\frac{7}{144}$$

$$342) \left(\frac{25}{31}n + 6\frac{23}{34}\right)\left(\frac{17}{48}n^2 + 19\frac{3}{4}n - \frac{3}{8}\right)$$

$$\frac{425}{1488}n^3 + 18\frac{869}{2976}n^2 + 131\frac{294}{527}n - 2\frac{137}{272}$$

$$344) \left(4p - \frac{32}{43}\right)\left(\frac{15}{31}p^2 + 5\frac{23}{27}p - 2\frac{29}{34}\right)$$

$$1\frac{29}{31}p^3 + 23\frac{1703}{35991}p^2 - 15\frac{15131}{19737}p + 2\frac{90}{731}$$

$$346) \left(1\frac{20}{21}x + 3\frac{1}{10}\right)\left(8\frac{11}{12}x^2 + \frac{15}{22}x + 1\frac{2}{27}\right)$$

$$17\frac{103}{252}x^3 + 28\frac{8989}{9240}x^2 + 4\frac{5255}{24948}x + 3\frac{89}{270}$$

$$348) \left(\frac{6}{7}b + 43\right)\left(12\frac{25}{28}b^2 + 1\frac{17}{35}b + 5\frac{1}{29}\right)$$

$$11\frac{5}{98}b^3 + 555\frac{653}{980}b^2 + 68\frac{204}{1015}b + 216\frac{14}{29}$$

$$350) \left(1\frac{12}{29}x - 3\frac{5}{12}\right)\left(\frac{3}{14}x^2 + \frac{1}{15}x + 37\frac{12}{13}\right)$$

$$\frac{123}{406}x^3 - \frac{15539}{24360}x^2 + 53\frac{907}{2340}x - 129\frac{89}{156}$$

$$352) \left(17\frac{1}{46}n - 1\frac{7}{29}\right)\left(10\frac{7}{8}n^2 - 1\frac{2}{15}n + 2\frac{15}{19}\right)$$

$$185\frac{41}{368}n^3 - 32\frac{91}{115}n^2 + 48\frac{112611}{126730}n - 3\frac{255}{551}$$

$$354) \left(2x + \frac{4}{27}\right)\left(12x^2 + 46\frac{1}{20}x + 4\frac{1}{24}\right)$$

$$24x^3 + 93\frac{79}{90}x^2 + 14\frac{163}{180}x + \frac{97}{162}$$

$$356) \left(7a + 1\frac{41}{42}\right)\left(\frac{16}{29}a^2 + \frac{5}{24}a + 10\frac{2}{47}\right)$$

$$3\frac{25}{29}a^3 + 2\frac{891}{1624}a^2 + 70\frac{33617}{47376}a + 19\frac{835}{987}$$

$$358) \left(22\frac{18}{43}p - 1\frac{9}{49}\right) \left(18\frac{23}{48}p^2 + 13\frac{29}{46}p + 9\frac{1}{22}\right)$$

$$78\frac{1210465}{2132284}p^3 - 52\frac{2207}{297528}p^2 - 149\frac{91094}{1599213}p - 10\frac{381}{539}$$

$$359) \left(\frac{11}{29}n + 3\frac{1}{28}\right) \left(1\frac{32}{35}n^2 + 18\frac{3}{28}n + 14\frac{32}{39}\right)$$

$$\frac{737}{1015}n^3 + 12\frac{1931}{2842}n^2 + 60\frac{522877}{886704}n + 44\frac{541}{546}$$

$$361) \left(\frac{31}{33}m + 9\frac{5}{16}\right) \left(\frac{7}{33}m^2 - 1\frac{3}{14}m + \frac{4}{21}\right)$$

$$\frac{217}{1089}m^3 + \frac{3085}{3696}m^2 - 11\frac{409}{3168}m + 1\frac{65}{84}$$

$$363) \left(14\frac{13}{50}r + 15\frac{9}{16}\right) \left(1\frac{1}{5}r^2 + \frac{8}{25}r + 7\frac{13}{34}\right)$$

$$17\frac{14}{125}r^3 + 23\frac{1191}{5000}r^2 + 110\frac{429}{1700}r + 114\frac{483}{544}$$

$$365) \left(1\frac{17}{20}b - 1\frac{16}{43}\right) \left(1\frac{7}{13}b^2 + 1\frac{4}{5}b + 13\frac{5}{21}\right)$$

$$2\frac{11}{13}b^3 + 1\frac{12247}{55900}b^2 + 22\frac{187}{9030}b - 18\frac{148}{903}$$

$$367) \left(9x + 11\frac{40}{41}\right) \left(19\frac{21}{26}x^2 + 11\frac{43}{48}x + 1\frac{43}{45}\right)$$

$$178\frac{7}{26}x^3 + 344\frac{2317}{8528}x^2 + 160\frac{589}{9840}x + 23\frac{773}{1845}$$

$$369) \left(19\frac{7}{48}a + 19\frac{2}{9}\right) \left(27a^2 - \frac{4}{29}a - \frac{13}{22}\right)$$

$$516\frac{15}{16}a^3 + 516\frac{125}{348}a^2 - 13\frac{88637}{91872}a - 11\frac{71}{198}$$

$$371) \left(1\frac{7}{8}k + 17\frac{44}{45}\right) \left(\frac{1}{2}k^2 + 25\frac{33}{47}k + 3\frac{3}{8}\right)$$

$$\frac{15}{16}k^3 + 57\frac{763}{4230}k^2 + 468\frac{53503}{135360}k + 60\frac{27}{40}$$

$$373) \left(1\frac{11}{19}x + 15\frac{4}{21}\right) \left(\frac{2}{9}x^2 - \frac{23}{49}x + \frac{8}{23}\right)$$

$$\frac{20}{57}x^3 + 2\frac{15950}{25137}x^2 - 6\frac{261271}{449673}x + 5\frac{137}{483}$$

$$374) \left(24\frac{11}{23}m + 10\frac{13}{33}\right) \left(3\frac{13}{24}m^2 + 1\frac{26}{49}m + 14\frac{4}{17}\right)$$

$$86\frac{383}{552}m^3 + 74\frac{248669}{892584}m^2 + 81\frac{597838}{1896741}m - 135\frac{167591}{1896741}$$

$$360) \left(1\frac{1}{12}x + 1\frac{9}{40}\right) \left(17\frac{3}{16}x^2 + 1\frac{17}{33}x - \frac{3}{4}\right)$$

$$18\frac{119}{192}x^3 + 22\frac{8821}{12672}x^2 + 1\frac{23}{528}x - \frac{147}{160}$$

$$362) \left(1\frac{3}{19}x + 19\frac{7}{18}\right) \left(1\frac{31}{47}x^2 + 1\frac{7}{50}x - 2\frac{38}{49}\right)$$

$$1\frac{823}{893}x^3 + 33\frac{1753}{3525}x^2 + 18\frac{248461}{279300}x - 53\frac{359}{441}$$

$$364) \left(3\frac{9}{23}n + 25\frac{8}{45}\right) \left(\frac{33}{38}n^2 - \frac{1}{44}n + 46\frac{18}{25}\right)$$

$$2\frac{413}{437}n^3 + 21\frac{56807}{72105}n^2 - 40\frac{14752841}{21631500}n - 15\frac{18211}{5407875}$$

$$366) \left(6\frac{4}{9}v - 1\frac{4}{35}\right) \left(\frac{23}{24}v^2 - 1\frac{7}{39}v + 10\frac{1}{2}\right)$$

$$6\frac{19}{108}v^3 - 8\frac{65749}{98280}v^2 + 68\frac{103}{105}v - 11\frac{7}{10}$$

$$368) \left(\frac{3}{10}n + \frac{11}{19}\right) \left(\frac{19}{47}n^2 - 1\frac{31}{33}n + 7\frac{1}{12}\right)$$

$$\frac{57}{470}n^3 - \frac{899}{2585}n^2 + 1\frac{1}{456}n + 4\frac{23}{228}$$

$$370) \left(14\frac{25}{33}x + 1\frac{5}{7}\right) \left(1\frac{12}{37}x^2 + 18\frac{7}{8}x + \frac{5}{7}\right)$$

$$19\frac{664}{1221}x^3 + 280\frac{8005}{9768}x^2 + 42\frac{415}{462}x + 1\frac{11}{49}$$

$$372) \left(10\frac{1}{6}n + 12\frac{5}{6}\right) \left(13\frac{27}{38}n^2 - 2\frac{19}{25}n + 1\frac{2}{11}\right)$$

$$139\frac{89}{228}n^3 + 147\frac{5083}{5700}n^2 - 23\frac{334}{825}n + 15\frac{1}{6}$$

$$375) \left(1\frac{38}{41}p - 25\right) \left(24\frac{1}{4}p^2 + 12\frac{7}{30}p + 14\frac{14}{23}\right)$$

$$46\frac{119}{164}p^3 - 582\frac{1669}{2460}p^2 - 277\frac{3875}{5658}p - 365\frac{5}{23}$$

$$377) \left(46n + 6\frac{14}{15}\right) \left(1\frac{6}{13}n^2 - \frac{43}{47}n - 1\frac{7}{18}\right)$$

$$67\frac{3}{13}n^3 - 31\frac{671}{705}n^2 - 70\frac{491}{2115}n - 9\frac{17}{27}$$

$$379) \left(1\frac{1}{3}x + 28\right) \left(5\frac{17}{48}x^2 - 2\frac{5}{13}x + 3\frac{8}{33}\right)$$

$$7\frac{5}{36}x^3 + 146\frac{115}{156}x^2 - 62\frac{574}{1287}x + 90\frac{26}{33}$$

$$381) \left(11b + 1\frac{11}{40}\right) \left(\frac{19}{50}b^2 - \frac{5}{6}b - \frac{29}{34}\right)$$

$$4\frac{9}{50}b^3 - 8\frac{4093}{6000}b^2 - 10\frac{121}{272}b - 1\frac{7}{80}$$

$$383) \left(\frac{3}{10}x + \frac{9}{14}\right) \left(11\frac{11}{17}x^2 + 16\frac{43}{44}x + 23\frac{11}{28}\right)$$

$$3\frac{42}{85}x^3 + 12\frac{30399}{52360}x^2 + 17\frac{41}{44}x + 15\frac{15}{392}$$

$$385) \left(16\frac{37}{42}v - \frac{6}{23}\right) \left(1\frac{1}{3}v^2 - 24v - 1\frac{11}{20}\right)$$

$$22\frac{32}{63}v^3 - 405\frac{79}{161}v^2 - 19\frac{17477}{19320}v + \frac{93}{230}$$

$$387) \left(\frac{34}{49}k + \frac{2}{3}\right) \left(20\frac{9}{34}k^2 - \frac{29}{37}k - 46\right)$$

$$14\frac{3}{49}k^3 + 12\frac{89315}{92463}k^2 - 32\frac{2398}{5439}k - 30\frac{2}{3}$$

$$389) \left(24\frac{27}{35}x + \frac{7}{20}\right) \left(8\frac{15}{16}x^2 + 18\frac{5}{48}x - 1\frac{5}{46}\right)$$

$$221\frac{221}{560}x^3 + 451\frac{1331}{2240}x^2 - 21\frac{19709}{154560}x - \frac{357}{920}$$

$$391) \left(\frac{23}{25}r + 14\frac{4}{5}\right) \left(22\frac{17}{31}r^2 + 2r + \frac{11}{16}\right)$$

$$20\frac{577}{775}r^3 + 335\frac{431}{775}r^2 + 30\frac{93}{400}r + 10\frac{7}{40}$$

$$393) \left(20\frac{37}{42}x + 15\frac{3}{4}\right) \left(11x^2 - \frac{26}{37}x + 15\frac{17}{24}\right)$$

$$229\frac{29}{42}x^3 + 158\frac{1793}{3108}x^2 + 316\frac{34961}{37296}x + 247\frac{13}{32}$$

$$376) \left(8\frac{38}{45}x - 1\frac{1}{36}\right) \left(22\frac{17}{30}x^2 - \frac{2}{5}x - 1\frac{2}{7}\right)$$

$$199\frac{398}{675}x^3 - 26\frac{3949}{5400}x^2 - 10\frac{121}{126}x + 1\frac{9}{28}$$

$$378) \left(1\frac{23}{24}r + 1\frac{23}{48}\right) \left(\frac{13}{42}r^2 - 27r - 2\right)$$

$$\frac{611}{1008}r^3 - 52\frac{841}{2016}r^2 - 43\frac{41}{48}r - 2\frac{23}{24}$$

$$380) \left(\frac{1}{20}n - 7\right) \left(1\frac{9}{20}n^2 + 1\frac{2}{9}n + \frac{40}{47}\right)$$

$$\frac{29}{400}n^3 - 10\frac{4}{45}n^2 - 8\frac{217}{423}n - 5\frac{45}{47}$$

$$382) \left(\frac{37}{38}b + 14\frac{32}{37}\right) \left(1\frac{1}{12}b^2 + 6\frac{6}{29}b + 6\frac{19}{48}\right)$$

$$1\frac{25}{456}b^3 + 22\frac{18001}{122322}b^2 + 98\frac{963311}{1957152}b + 95\frac{65}{888}$$

$$384) \left(13\frac{13}{28}x - \frac{2}{3}\right) \left(1\frac{13}{15}x^2 + 1\frac{11}{12}x - 1\frac{35}{41}\right)$$

$$25\frac{2}{15}x^3 + 24\frac{2833}{5040}x^2 - 26\frac{1219}{5166}x + 1\frac{29}{123}$$

$$386) \left(11\frac{28}{45}a + 15\frac{1}{7}\right) \left(2\frac{11}{24}a^2 - 1\frac{10}{13}a + 13\frac{1}{12}\right)$$

$$28\frac{617}{1080}a^3 + 16\frac{10873}{16380}a^2 + 125\frac{13081}{49140}a + 198\frac{5}{42}$$

$$388) \left(49p + 1\frac{11}{14}\right) \left(22\frac{8}{17}p^2 + 1\frac{12}{29}p - 2\right)$$

$$1101\frac{1}{17}p^3 + 109\frac{1387}{3451}p^2 - 95\frac{193}{406}p - 3\frac{4}{7}$$

$$390) \left(1\frac{1}{3}n + 20\frac{17}{28}\right) \left(14\frac{11}{49}n^2 + 1\frac{27}{28}n - \frac{3}{37}\right)$$

$$18\frac{142}{147}n^3 + 295\frac{3067}{4116}n^2 + 40\frac{10739}{29008}n - 1\frac{695}{1036}$$

$$392) \left(1\frac{5}{8}m - \frac{29}{41}\right) \left(\frac{19}{31}m^2 + 8\frac{5}{7}m + 1\frac{7}{8}\right)$$

$$\frac{247}{248}m^3 + 13\frac{51759}{71176}m^2 - 3\frac{2147}{18368}m - 1\frac{107}{328}$$

$$394) \left(\frac{2}{5}n - \frac{13}{15}\right) \left(46n^2 + \frac{15}{23}n + \frac{25}{37}\right)$$

$$18\frac{2}{5}n^3 - 39\frac{209}{345}n^2 - \frac{251}{851}n - \frac{65}{111}$$

$$395) \left( \frac{3}{5}b - \frac{38}{43} \right) \left( 7 \frac{5}{11}b^2 + 20 \frac{1}{2}b + 1 \frac{1}{4} \right)$$

$$4 \frac{26}{55}b^3 + 5 \frac{3369}{4730}b^2 - 17 \frac{63}{172}b - 1 \frac{9}{86}$$

$$397) \left( \frac{3}{5}n + 24 \frac{1}{2} \right) \left( 8 \frac{31}{42}n^2 + 1 \frac{1}{6}n + 15 \frac{1}{10} \right)$$

$$5 \frac{17}{70}n^3 + 214 \frac{47}{60}n^2 + 37 \frac{193}{300}n + 369 \frac{19}{20}$$

$$399) \left( 3 \frac{29}{39}k - \frac{5}{17} \right) \left( 15 \frac{25}{46}k^2 + 1 \frac{1}{4}k + \frac{2}{21} \right)$$

$$58 \frac{13}{69}k^3 + \frac{1645}{15249}k^2 - \frac{619}{55692}k - \frac{10}{357}$$

$$401) \left( 15 \frac{58}{63}n + 1 \right) \left( 1 \frac{1}{2}n^2 + 23 \frac{1}{2}n - 1 \frac{1}{47} \right)$$

$$23 \frac{37}{42}n^3 + 375 \frac{40}{63}n^2 + 7 \frac{475}{1974}n - 1 \frac{1}{47}$$

$$403) \left( \frac{7}{8}x + 45 \frac{27}{43} \right) \left( 1 \frac{19}{82}x^2 + 8x - 1 \frac{14}{33} \right)$$

$$1 \frac{51}{656}x^3 + 63 \frac{353}{1763}x^2 + 363 \frac{8821}{11352}x - 64 \frac{466}{473}$$

$$405) \left( 15 \frac{53}{78}p - 1 \frac{3}{8} \right) \left( 1 \frac{16}{33}p^2 + 17 \frac{3}{28}p + 1 \frac{55}{96} \right)$$

$$23 \frac{725}{2574}p^3 + 266 \frac{69}{364}p^2 + 1 \frac{7349}{52416}p - 2 \frac{125}{768}$$

$$407) \left( \frac{7}{46}n - 29 \right) \left( \frac{28}{47}n^2 + \frac{7}{82}n + 34 \frac{13}{54} \right)$$

$$\frac{98}{1081}n^3 - 17 \frac{46733}{177284}n^2 + 2 \frac{74849}{101844}n - 95 \frac{1685963}{2393334}$$

$$409) \left( 1 \frac{2}{7}r + 36 \frac{41}{45} \right) \left( \frac{23}{40}r^2 - 1 \frac{4}{25}r + 1 \frac{31}{81} \right)$$

$$\frac{207}{280}r^3 + 19 \frac{9229}{12600}r^2 - 41 \frac{44}{1125}r + 51 \frac{137}{3645}$$

$$411) \left( \frac{8}{21}n - \frac{17}{31} \right) \left( 1 \frac{15}{74}n^2 - 1 \frac{11}{16}n + 37 \frac{5}{6} \right)$$

$$\frac{356}{777}n^3 - 1 \frac{2428}{8029}n^2 + 15 \frac{10565}{31248}n - 20 \frac{139}{186}$$

$$413) \left( 1 \frac{19}{34}v - 1 \frac{10}{17} \right) \left( 1 \frac{19}{21}v^2 + 1 \frac{12}{43}v + 1 \frac{5}{16} \right)$$

$$2 \frac{346}{357}v^3 - 1 \frac{321}{10234}v^2 + \frac{339}{23392}v - 2 \frac{23}{272}$$

$$396) \left( 23 \frac{27}{32}v + \frac{7}{13} \right) \left( 20 \frac{10}{43}v^2 + 25v + 1 \frac{29}{49} \right)$$

$$482 \frac{289}{688}v^3 + 606 \frac{17677}{17888}v^2 + 51 \frac{607}{1456}v + \frac{6}{7}$$

$$398) \left( 1 \frac{25}{49}x + 1 \frac{13}{19} \right) \left( 1 \frac{11}{50}x^2 + \frac{13}{17}x - \frac{1}{2} \right)$$

$$1 \frac{1032}{1225}x^3 + 3 \frac{82933}{395675}x^2 + \frac{8433}{15827}x - \frac{16}{19}$$

$$400) \left( \frac{21}{22}a + 4 \right) \left( \frac{2}{9}a^2 - \frac{1}{2}a + \frac{17}{20} \right)$$

$$\frac{7}{33}a^3 + \frac{163}{396}a^2 - 1 \frac{83}{440}a + 3 \frac{2}{5}$$

$$402) \left( 5 \frac{7}{50}x - 1 \frac{37}{55} \right) \left( \frac{34}{57}x^2 - 85x + 1 \frac{2}{11} \right)$$

$$3 \frac{94}{1425}x^3 - 437 \frac{5629}{6270}x^2 + 148 \frac{141}{550}x - 1 \frac{591}{605}$$

$$404) \left( 1 \frac{43}{71}m + 1 \frac{24}{29} \right) \left( 47 \frac{43}{63}m^2 + 71m - 64 \right)$$

$$76 \frac{836}{1491}m^3 + 201 \frac{263}{1827}m^2 + 26 \frac{2055}{2059}m - 116 \frac{28}{29}$$

$$406) \left( \frac{19}{84}x + 48 \frac{7}{16} \right) \left( \frac{1}{19}x^2 - 68x + 13 \frac{82}{91} \right)$$

$$\frac{1}{84}x^3 - 12 \frac{5309}{6384}x^2 - 3290 \frac{2315}{3822}x + 673 \frac{487}{1456}$$

$$408) \left( 33 \frac{40}{99}b + 46 \frac{9}{50} \right) \left( \frac{7}{74}b^2 + 41b + 89 \right)$$

$$3 \frac{1171}{7326}b^3 + 1373 \frac{342137}{366300}b^2 + 4866 \frac{1681}{4950}b + 4110 \frac{1}{50}$$

$$410) \left( 9 \frac{3}{14}x + 7 \frac{19}{24} \right) \left( \frac{1}{2}x^2 - 1 \frac{14}{69}x + 24 \frac{11}{19} \right)$$

$$4 \frac{17}{28}x^3 - 7 \frac{1453}{7728}x^2 + 217 \frac{23095}{220248}x + 191 \frac{233}{456}$$

$$412) \left( 28 \frac{1}{28}a - 1 \frac{4}{19} \right) \left( \frac{36}{59}a^2 - 1 \frac{5}{47}a - 39 \frac{19}{22} \right)$$

$$17 \frac{44}{413}a^3 - 31 \frac{279138}{368809}a^2 - 57 \frac{18949979}{32455192}a + 48 \frac{107}{418}$$

$$414) \left( \frac{16}{21}x - \frac{49}{60} \right) \left( \frac{1}{8}x^2 + 18 \frac{14}{57}x - \frac{12}{37} \right)$$

$$\frac{2}{21}x^3 + 13 \frac{153089}{191520}x^2 - 15 \frac{6541}{44289}x + \frac{49}{185}$$

$$415) \left(43\frac{26}{49}x + 31\right) \left(48\frac{7}{39}x^2 + 1\frac{33}{58}x + 16\right)$$

$$2097\frac{180}{637}x^3 + 1561\frac{13651}{15834}x^2 + 745\frac{363}{2842}x + 496$$

$$417) \left(23\frac{13}{77}x - 1\frac{32}{35}\right) \left(15\frac{11}{20}x^2 - 1\frac{19}{24}x + 4\frac{32}{39}\right)$$

$$360\frac{106}{385}x^3 - 71\frac{6421}{23100}x^2 + 115\frac{4621}{40040}x - 9\frac{311}{1365}$$

$$419) \left(\frac{19}{35}p - 1\frac{9}{16}\right) \left(41\frac{37}{85}p^2 + 33\frac{19}{32}p + \frac{8}{99}\right)$$

$$-5\frac{291101}{294525}p^3 + 10\frac{4312787}{9424800}p^2 + 4\frac{2363729}{4569600}p - \frac{25}{198}$$

$$421) \left(6\frac{69}{98}r + \frac{59}{61}\right) \left(48\frac{71}{79}r^2 + \frac{9}{14}r + 29\frac{43}{51}\right)$$

$$-3\frac{58952239}{168597534}r^3 + \frac{31595891}{48170724}r^2 - 3\frac{17666933}{168597534}r + 3\frac{10958819}{28099589}r^2 - 7\frac{46534}{93093}r^2 + 7\frac{5491}{8866}r - 4\frac{227}{372}$$

$$423) \left(29\frac{1}{7}x + 31\frac{45}{94}\right) \left(11\frac{65}{81}x^2 - 2\frac{3}{10}x + 42\right)$$

$$343\frac{181}{189}x^3 + 304\frac{66368}{133245}x^2 + 1151\frac{563}{940}x + 1322\frac{5}{47}$$

$$425) \left(\frac{15}{28}v + 40\right) \left(32\frac{17}{56}v^2 - 1\frac{28}{45}v + 1\frac{27}{40}\right)$$

$$17\frac{479}{1568}v^3 + 1291\frac{23}{84}v^2 - 63\frac{1999}{2016}v + 67$$

$$427) \left(1\frac{37}{41}n - 1\frac{13}{63}\right) \left(20\frac{20}{31}n^2 + 8\frac{15}{49}n + 38\frac{39}{56}\right)$$

$$1\frac{289}{1271}n^3 + 15\frac{13229}{560511}n^2 + 63\frac{302501}{506268}n - 46\frac{601}{882}$$

$$429) \left(1\frac{5}{8}a + 10\frac{5}{6}\right) \left(1\frac{13}{63}a^2 - 1\frac{2}{41}a + 11\frac{37}{42}\right)$$

$$1\frac{121}{126}a^3 + 11\frac{22597}{61992}a^2 + 7\frac{13015}{13776}a + 128\frac{179}{252}$$

$$431) \left(16\frac{34}{69}x - \frac{41}{50}\right) \left(x^2 + \frac{62}{97}x + 28\frac{11}{51}\right)$$

$$16\frac{34}{69}x^3 + 9\frac{241537}{334650}x^2 - 38\frac{805549}{1706715}x - 23\frac{349}{2550}$$

$$433) \left(\frac{59}{77}n + \frac{20}{39}\right) \left(\frac{36}{53}n^2 + 21\frac{18}{19}n - \frac{61}{88}\right)$$

$$\frac{2124}{4081}n^3 + 1\frac{850228}{33264231}n^2 - 5\frac{15802009}{38016264}n - \frac{305}{858}$$

$$416) \left(1\frac{45}{56}a - 94\frac{15}{46}\right) \left(1\frac{12}{77}a^2 + \frac{5}{7}a + \frac{17}{46}\right)$$

$$2\frac{365}{4312}a^3 - 107\frac{73191}{99176}a^2 - 66\frac{261}{368}a - 34\frac{1819}{2116}$$

$$418) \left(46\frac{29}{63}k + 42\frac{55}{56}\right) \left(17\frac{1}{98}k^2 + 46\frac{69}{83}k + \frac{14}{19}\right)$$

$$18\frac{3222361}{9736398}k^3 - 15\frac{40425307}{77891184}k^2 + 6\frac{36691091}{38945592}k - 23\frac{914}{1947}$$

$$420) \left(24\frac{79}{85}n + 15\frac{9}{25}\right) \left(2\frac{31}{39}n^2 + \frac{54}{97}n - 2\frac{45}{88}\right)$$

$$8\frac{5668087}{5895175}n^3 - 3\frac{3203099}{3537105}n^2 + 6\frac{92974991}{141484200}n - 8\frac{385597}{176855}$$

$$422) \left(1\frac{83}{91}m - 3\frac{59}{62}\right) \left(1\frac{5}{21}m^2 - 1\frac{4}{11}m + 1\frac{1}{6}\right)$$

$$-3\frac{58952239}{168597534}m^3 + \frac{31595891}{48170724}m^2 - 3\frac{17666933}{168597534}m + 3\frac{10958819}{28099589}m^2 - 7\frac{46534}{93093}m^2 + 7\frac{5491}{8866}m - 4\frac{227}{372}$$

$$424) \left(30\frac{1}{14}n + 25\frac{53}{84}\right) \left(1\frac{9}{25}n^2 + \frac{1}{13}n + 37\frac{19}{36}\right)$$

$$40\frac{157}{175}n^3 + 37\frac{167}{975}n^2 + 1130\frac{3181}{6552}n + 961\frac{377}{432}$$

$$426) \left(34\frac{23}{35}x + 47\frac{33}{52}\right) \left(\frac{4}{9}x^2 - 1\frac{13}{14}x + 1\frac{17}{70}\right)$$

$$15\frac{127}{315}x^3 - 45\frac{38287}{57330}x^2 - 48\frac{101013}{127400}x + 59\frac{739}{3640}$$

$$428) \left(\frac{1}{5}b + 46\frac{3}{34}\right) \left(\frac{1}{4}b^2 - \frac{1}{2}b + 26\frac{46}{85}\right)$$

$$\frac{1}{20}b^3 + 11\frac{287}{680}b^2 - 17\frac{1251}{1700}b + 1223\frac{341}{1445}$$

$$430) \left(35\frac{13}{56}k + 42\frac{37}{58}\right) \left(1\frac{58}{73}k^2 + 1\frac{8}{15}k + 16\frac{11}{96}\right)$$

$$-12\frac{446963}{1778280}k^3 - 20\frac{738053}{1778280}k^2 + 29\frac{6074853}{18968320}k + 7\frac{1148}{1422}$$

$$432) \left(1\frac{11}{63}x + 32\frac{13}{92}\right) \left(29x^2 - 1\frac{49}{72}x + 18\frac{69}{70}\right)$$

$$34\frac{4}{63}x^3 + 47\frac{435446}{456435}x^2 - 31\frac{1159657}{1622880}x + 22\frac{410443}{3651480}$$

$$434) \left(\frac{61}{84}m + \frac{39}{40}\right) \left(9m^2 + 30\frac{53}{56}m - \frac{11}{31}\right)$$

$$6\frac{15}{28}m^3 + 31\frac{5833}{23520}m^2 + 29\frac{27233}{29760}m - \frac{429}{1240}$$

$$435) \left(11\frac{72}{91}p - \frac{9}{11}\right) \left(\frac{23}{58}p^2 + 1\frac{1}{33}p + 10\frac{23}{44}\right)$$

$$4\frac{123}{182}p^3 + 11\frac{143531}{174174}p^2 + 123\frac{10249}{44044}p - 8\frac{295}{484}$$

$$437) \left(21\frac{1}{6}n + 48\frac{9}{13}\right) \left(1\frac{36}{43}n^2 + 1\frac{9}{56}n + 1\frac{28}{89}\right)$$

$$38\frac{229}{258}n^3 + 114\frac{4961}{187824}n^2 + 84\frac{1713}{4984}n + 64\frac{1}{89}$$

$$439) \left(26\frac{8}{21}r + 1\frac{6}{29}\right) \left(33\frac{49}{99}r^2 + 21\frac{14}{19}r + 1\frac{25}{27}\right)$$

$$-366\frac{509662}{3436587}r^3 + 613\frac{47105}{54549}r^2 + 77\frac{13084}{312417}r + 2\frac{254}{783}52\frac{2}{27}x^3 + 68\frac{70697}{91719}x^2 - 5\frac{1583809}{2292975}x - 2\frac{669}{1975}$$

$$441) \left(\frac{1}{34}n + 1\frac{9}{23}\right) \left(1\frac{14}{27}n^2 - 1\frac{1}{5}n - \frac{11}{45}\right)$$

$$\frac{41}{918}n^3 + 2\frac{4087}{52785}n^2 - 1\frac{4763}{7038}n - \frac{352}{1035}$$

$$443) \left(\frac{2}{7}v - 1\frac{1}{10}\right) \left(8\frac{83}{98}v^2 - \frac{5}{29}v - 1\frac{8}{11}\right)$$

$$2\frac{181}{343}v^3 - 9\frac{22193}{28420}v^2 - \frac{1357}{4466}v + 1\frac{9}{10}$$

$$445) \left(1\frac{1}{31}x - 92\right) \left(21\frac{14}{17}x^2 + 16\frac{1}{4}x - \frac{1}{13}\right)$$

$$22\frac{278}{527}x^3 - 1990\frac{522}{527}x^2 - 1495\frac{32}{403}x + 7\frac{1}{13}$$

$$446) \left(10\frac{27}{70}a + 47\frac{21}{55}\right) \left(100\frac{62}{97}a^2 + 32\frac{55}{79}a + \frac{17}{73}\right)$$

$$-1\frac{165044606}{215368615}a^3 + 2\frac{67699011}{86147446}a^2 - 3\frac{380413367}{430737230}a + 1\frac{13551319}{215368615}$$

$$447) \left(1\frac{28}{83}p - 2\frac{7}{24}\right) \left(5\frac{23}{80}p^2 + 22\frac{28}{39}p - \frac{11}{19}\right)$$

$$7\frac{473}{6640}p^3 - 18\frac{12628831}{118085760}p^2 - 16\frac{43963}{94620}p + 1\frac{149}{456}$$

$$449) \left(15x + 47\frac{48}{55}\right) \left(1\frac{77}{87}x^2 + 1\frac{8}{63}x + 41\frac{14}{31}\right)$$

$$28\frac{8}{29}x^3 + 107\frac{1648}{11165}x^2 + 675\frac{77983}{107415}x + 605\frac{191746468}{3115035245}x^3 + 1\frac{1930}{7007}x^2 - 1\frac{2956}{7007}x + \frac{5}{11}$$

$$451) \left(42\frac{3}{5}m + 35\frac{1}{4}\right) \left(\frac{5}{24}m^2 + \frac{1}{9}m + 39\frac{63}{86}\right)$$

$$8\frac{7}{8}m^3 + 12\frac{37}{480}m^2 + 1696\frac{1351}{2580}m + 1400\frac{197}{344}$$

$$436) \left(\frac{6}{49}x + 39\frac{2}{7}\right) \left(\frac{7}{19}x^2 + 48\frac{27}{46}x - 1\frac{23}{42}\right)$$

$$\frac{6}{133}x^3 + 20\frac{9060}{21413}x^2 + 1908\frac{9211}{15778}x - 60\frac{235}{294}$$

$$438) \left(88b + 1\frac{13}{71}\right) \left(1\frac{8}{9}b^2 + 49\frac{3}{10}b + 40\frac{39}{76}\right)$$

$$166\frac{2}{9}b^3 + 4340\frac{676}{1065}b^2 + 3623\frac{3269}{6745}b + 47\frac{1256}{1349}$$

$$440) \left(1\frac{10}{27}x + 1\frac{70}{79}\right) \left(38x^2 - 2\frac{5}{43}x - 1\frac{6}{25}\right)$$

$$-366\frac{509662}{3436587}r^3 + 613\frac{47105}{54549}r^2 + 77\frac{13084}{312417}r + 2\frac{254}{783}52\frac{2}{27}x^3 + 68\frac{70697}{91719}x^2 - 5\frac{1583809}{2292975}x - 2\frac{669}{1975}$$

$$442) \left(22\frac{37}{42}a + 1\frac{1}{65}\right) \left(1\frac{47}{78}a^2 + 1\frac{22}{39}a + 6\frac{3}{13}\right)$$

$$36\frac{2189}{3276}a^3 + 37\frac{8845}{21294}a^2 + 144\frac{1823}{11830}a + 6\frac{276}{845}$$

$$444) \left(7\frac{49}{55}x + 40\frac{11}{76}\right) \left(1\frac{4}{35}x^2 + 18\frac{85}{86}x - \frac{7}{15}\right)$$

$$8\frac{218}{275}x^3 - 33\frac{140461}{18872700}x^2 - 37\frac{114623}{125400}x - 18\frac{279}{380}$$

$$445) \left(48\frac{47}{76}k + 1\frac{17}{19}\right) \left(22k^2 - 1\frac{65}{76}k + \frac{1}{3}\right)$$

$$1069\frac{23}{38}k^3 - 48\frac{2979}{5776}k^2 + 12\frac{2993}{4332}k + \frac{12}{19}$$

$$450) \left(\frac{8}{49}n + \frac{10}{11}\right) \left(1\frac{7}{10}n^2 - 1\frac{17}{26}n + \frac{1}{2}\right)$$

$$452) \left(1\frac{7}{13}r + 12\frac{43}{96}\right) \left(\frac{3}{8}r^2 + 11\frac{7}{71}r - \frac{26}{43}\right)$$

$$\frac{15}{26}r^3 + 21\frac{175497}{236288}r^2 - 3\frac{216405}{317512}r - 7\frac{1087}{2064}$$

$$453) \left(47\frac{23}{27}n + 34\frac{44}{73}\right)\left(25\frac{3}{8}n^2 - \frac{56}{81}n + 37\frac{43}{96}\right)$$

$$-467\frac{47381}{319302}n^3 - 836\frac{272921}{638604}n^2 + 86\frac{817603}{1277208}n - 3851\frac{1503571}{2434416}x + 1\frac{8723}{13330}x^2 + 17\frac{14987}{16430}x + 7\frac{953}{2120}$$

$$455) \left(\frac{5}{34}b + 43\frac{9}{26}\right)\left(\frac{6}{11}b^2 + 1\frac{74}{79}b - 36\right)$$

$$\frac{15}{187}b^3 + 23\frac{20971}{22594}b^2 + 78\frac{22863}{34918}b - 1560\frac{6}{13}$$

$$457) \left(\frac{11}{24}x + \frac{1}{6}\right)\left(\frac{11}{21}x^2 + 22\frac{4}{49}x + 11\frac{37}{94}\right)$$

$$\frac{121}{504}x^3 + 10\frac{367}{1764}x^2 + 8\frac{99749}{110544}x + 1\frac{169}{188}$$

$$459) \left(42k + 6\frac{14}{39}\right)\left(9\frac{22}{83}k^2 + 65k + 2\right)$$

$$389\frac{11}{83}k^3 + 2788\frac{2966}{3237}k^2 + 497\frac{1}{3}k + 12\frac{28}{39}$$

$$461) \left(46\frac{75}{77}x - \frac{8}{27}\right)\left(17\frac{1}{2}x^2 - 1\frac{49}{57}x - 1\frac{74}{83}\right)$$

$$-51\frac{5757271}{19671498}x^3 - 92\frac{21346}{39501}x^2 - 88\frac{2984911}{9835749}x + 1256\frac{47}{2241}\frac{3}{5}n^3 - 36\frac{191}{525}n^2 + 7\frac{3583}{3675}n - \frac{17}{35}$$

$$463) \left(35\frac{64}{97}m + 39\frac{17}{69}\right)\left(48\frac{41}{44}m^2 - 27m - 1\frac{13}{27}\right)$$

$$124\frac{1107599}{2650428}m^3 - 122\frac{1467596}{1987821}m^2 - 32\frac{320164}{1987821}m - 5305\frac{24687}{18660}x^3 + 11\frac{1260947}{3102540}x^2 + 383\frac{16867}{155127}x - 16\frac{28}{89}$$

$$465) \left(1\frac{5}{6}p + 45\frac{50}{57}\right)\left(1\frac{21}{34}p^2 - 1\frac{11}{12}p + 15\frac{29}{52}\right)$$

$$2\frac{197}{204}p^3 + 70\frac{16261}{23256}p^2 - 59\frac{7271}{17784}p + 713\frac{2203}{2964}$$

$$467) \left(38\frac{11}{12}x - \frac{9}{49}\right)\left(1\frac{51}{76}x^2 - 1\frac{1}{3}x + 32\frac{2}{19}\right)$$

$$65\frac{29}{912}x^3 - 52\frac{6563}{33516}x^2 + 1249\frac{3769}{5586}x - 5\frac{835}{931}$$

$$469) \left(42\frac{23}{34}r + 17\frac{1}{18}\right)\left(33\frac{1}{8}r^2 + 49\frac{3}{44}r + 43\frac{59}{68}\right)$$

$$1413\frac{179}{272}r^3 + 2659\frac{35}{1584}r^2 + 2709\frac{83}{57222}r + 748\frac{229}{1224} - 48\frac{10849956}{12939805}x^3 + 22\frac{1942081}{25879610}x^2 - 22\frac{6925737}{12939805}x - 12$$

$$471) \left(70n + \frac{13}{24}\right)\left(1\frac{10}{33}n^2 + 3\frac{33}{70}n - 1\frac{33}{41}\right)$$

$$91\frac{7}{33}n^3 + 243\frac{559}{792}n^2 - 124\frac{10587}{22960}n - \frac{481}{492}$$

$$454) \left(x + \frac{17}{40}\right)\left(1\frac{33}{43}x^2 + \frac{28}{31}x + 17\frac{28}{53}\right)$$

$$-467\frac{47381}{319302}n^3 - 836\frac{272921}{638604}n^2 + 86\frac{817603}{1277208}n - 3851\frac{1503571}{2434416}x + 1\frac{8723}{13330}x^2 + 17\frac{14987}{16430}x + 7\frac{953}{2120}$$

$$456) \left(50\frac{36}{41}v - 2\frac{36}{53}\right)\left(14\frac{18}{35}v^2 - 1\frac{10}{57}v - 1\frac{12}{19}\right)$$

$$-252\frac{1195828}{4335135}v^3 - 98\frac{2997112}{4335135}v^2 - 79\frac{106801}{123861}v + 4\frac{374}{1007}$$

$$458) \left(1\frac{47}{56}n - 1\frac{16}{31}\right)\left(18\frac{43}{64}n^2 + 34\frac{5}{12}n + 49\frac{8}{85}\right)$$

$$34\frac{1229}{3584}n^3 + 34\frac{5911}{5952}n^2 + 38\frac{52237}{442680}n - 74\frac{1141}{2635}$$

$$460) \left(20\frac{5}{62}a - 1\frac{1}{5}\right)\left(64a^2 + 29\frac{14}{17}a + 49\frac{23}{99}\right)$$

$$1285\frac{5}{31}a^3 + 522\frac{399}{5270}a^2 + 952\frac{72049}{86955}a - 59\frac{13}{165}$$

$$462) \left(1\frac{2}{15}n - \frac{17}{35}\right)\left(42n^2 - 14\frac{3}{35}n + 1\right)$$

$$-51\frac{5757271}{19671498}x^3 - 92\frac{21346}{39501}x^2 - 88\frac{2984911}{9835749}x + 1256\frac{47}{2241}\frac{3}{5}n^3 - 36\frac{191}{525}n^2 + 7\frac{3583}{3675}n - \frac{17}{35}$$

$$464) \left(32\frac{1}{83}x - 1\frac{32}{89}\right)\left(9\frac{11}{20}x^2 + \frac{16}{21}x + 12\right)$$

$$124\frac{1107599}{2650428}m^3 - 122\frac{1467596}{1987821}m^2 - 32\frac{320164}{1987821}m - 5305\frac{24687}{18660}x^3 + 11\frac{1260947}{3102540}x^2 + 383\frac{16867}{155127}x - 16\frac{28}{89}$$

$$466) \left(1\frac{1}{19}n - \frac{20}{43}\right)\left(72\frac{43}{66}n^2 - 1\frac{77}{97}n + 3\frac{61}{68}\right)$$

$$-20\frac{305414}{2339931}n^3 - 35\frac{1777375}{2615217}n^2 + 4\frac{1261683}{1347233}n - 1\frac{594}{731}$$

$$468) \left(1\frac{8}{27}b + 15\frac{66}{85}\right)\left(4\frac{17}{20}b^2 + 33\frac{22}{23}b + 12\right)$$

$$6\frac{31}{108}b^3 + 120\frac{563317}{1055700}b^2 + 551\frac{4744}{17595}b + 189\frac{27}{85}$$

$$470) \left(88x - \frac{45}{79}\right)\left(12\frac{53}{82}x^2 - 1\frac{26}{47}x + 22\frac{31}{85}\right)$$

$$1413\frac{179}{272}r^3 + 2659\frac{35}{1584}r^2 + 2709\frac{83}{57222}r + 748\frac{229}{1224} - 48\frac{10849956}{12939805}x^3 + 22\frac{1942081}{25879610}x^2 - 22\frac{6925737}{12939805}x - 12$$

$$472) \left(1\frac{14}{55}a - 1\frac{19}{58}\right)\left(\frac{5}{11}a^2 - 3\frac{8}{55}a + 47\frac{32}{61}\right)$$

$$69\frac{69}{121}a^3 - 4\frac{96421}{175450}a^2 + 63\frac{155209}{194590}a - 63\frac{329}{3538}$$

$$473) \left(22\frac{25}{62}v + 6\frac{59}{75}\right)\left(\frac{3}{16}v^2 + 8\frac{16}{87}v + 38\frac{35}{47}\right)$$

$$4\frac{199}{992}v^3 + 1\frac{13060369}{152110800}v^2 + 5\frac{5605249}{6337950}v - 5\frac{2782574}{9506925}$$

$$475) \left(\frac{53}{76}x + 48\frac{22}{87}\right)\left(1\frac{2}{3}x^2 + 18\frac{3}{10}x - \frac{1}{9}\right)$$

$$1\frac{37}{228}x^3 + 93\frac{36359}{198360}x^2 + 882\frac{94231}{99180}x - 5\frac{283}{783}$$

$$477) \left(29\frac{53}{97}p + 15\frac{11}{24}\right)\left(35\frac{21}{38}p^2 - \frac{3}{11}p + 39\frac{53}{81}\right)$$

$$15\frac{713810}{4926339}p^3 - 3\frac{29332777}{78821424}p^2 + 23\frac{610501}{4378968}p + 13\frac{538673}{895698}x\frac{49}{59}x^2 - 199\frac{3277}{3894}x - 150\frac{1}{6}$$

$$479) \left(27\frac{81}{83}n - 81\right)\left(\frac{29}{31}n^2 + 37n + 1\frac{1}{3}\right)$$

$$26\frac{440}{2573}n^3 + 959\frac{860}{2573}n^2 - 2959\frac{58}{83}n - 108$$

$$481) \left(\frac{11}{26}r + 1\frac{7}{22}\right)\left(12\frac{5}{33}r^2 + 13\frac{65}{93}r - \frac{51}{80}\right)$$

$$5\frac{11}{78}r^3 + 21\frac{18311}{22506}r^2 + 17\frac{1676657}{2127840}r - \frac{1479}{1760}$$

$$483) \left(22\frac{32}{33}x - \frac{60}{77}\right)\left(24\frac{4}{7}x^2 + 1\frac{11}{39}x - 1\frac{3}{17}\right)$$

$$564\frac{92}{231}x^3 + 10\frac{1730}{5733}x^2 - 28\frac{1132}{51051}x + \frac{1200}{1309}$$

$$485) \left(14\frac{41}{47}b + \frac{23}{52}\right)\left(13\frac{1}{42}b^2 - 1\frac{1}{9}b + 6\frac{33}{92}\right)$$

$$-109\frac{896369}{1770678}b^3 - 10\frac{26151}{34216}b^2 + 94\frac{39073}{505908}b + 2\frac{13}{16}$$

$$487) \left(1\frac{19}{31}x - \frac{1}{2}\right)\left(\frac{11}{56}x^2 + \frac{18}{31}x - 1\frac{87}{95}\right)$$

$$\frac{275}{868}x^3 + \frac{90229}{107632}x^2 - 3\frac{224}{589}x + \frac{91}{95}$$

$$489) \left(18\frac{58}{69}n - 1\frac{19}{21}\right)\left(\frac{5}{12}n^2 + \frac{33}{64}n - 1\frac{53}{66}\right)$$

$$7\frac{176}{207}n^3 + 8\frac{21353}{23184}n^2 - 34\frac{121427}{127512}n + 3\frac{43}{99}$$

$$491) \left(21\frac{47}{83}k + 28\frac{82}{99}\right)\left(1\frac{1}{3}k^2 + 37\frac{31}{84}k + \frac{35}{92}\right)$$

$$28\frac{188}{249}k^3 - 237\frac{28567}{34362}k^2 + 3\frac{136783}{440979}k + 10\frac{4405}{4554}$$

$$474) \left(34\frac{8}{69}x + 1\frac{2}{77}\right)\left(11x^2 - 1\frac{5}{27}x - 1\frac{2}{3}\right)$$

$$375\frac{19}{69}x^3 - 29\frac{1930}{13041}x^2 - 58\frac{3628}{47817}x - 1\frac{164}{231}$$

$$476) \left(1\frac{8}{45}k - 1\frac{55}{73}\right)\left(10\frac{3}{11}k^2 + 44\frac{3}{34}k + 44\frac{5}{54}\right)$$

$$12\frac{49}{495}k^3 + 33\frac{1122551}{1228590}k^2 - 25\frac{1128217}{3015630}k + 52\frac{2702108}{16585965}$$

$$478) \left(x - 3\frac{10}{59}\right)\left(x^2 + 78x + 47\frac{25}{66}\right)$$

$$480) \left(32\frac{1}{12}n + 23\frac{3}{4}\right)\left(40\frac{2}{65}n^2 + 33\frac{1}{64}n + \frac{39}{43}\right)$$

$$1284\frac{25}{78}n^3 + 2009\frac{9805}{9984}n^2 + 813\frac{2421}{11008}n + 21\frac{93}{172}$$

$$482) \left(15m + 25\frac{43}{63}\right)\left(1\frac{7}{10}m^2 + 1\frac{19}{20}m + 3\frac{8}{81}\right)$$

$$25\frac{1}{2}m^3 + 72\frac{1147}{1260}m^2 + 96\frac{1063}{1890}m + 79\frac{2981}{5103}$$

$$484) \left(\frac{6}{41}n + 13\frac{17}{74}\right)\left(\frac{12}{29}n^2 + 8\frac{8}{17}n + 14\frac{17}{53}\right)$$

$$\frac{72}{1189}n^3 + 6\frac{533964}{747881}n^2 + 5\frac{31856049}{39637693}n + 26\frac{1385473}{1495762}$$

$$486) \left(1\frac{17}{18}v + \frac{58}{61}\right)\left(47\frac{11}{12}v^2 + 22\frac{41}{46}v + 23\frac{31}{74}\right)$$

$$93\frac{37}{216}v^3 + 90\frac{1195}{16836}v^2 + 67\frac{564917}{1868796}v + 22\frac{603}{2257}$$

$$488) \left(1\frac{18}{25}a - 1\frac{19}{30}\right)\left(48\frac{19}{45}a^2 + 35\frac{86}{93}a - \frac{10}{27}\right)$$

$$83\frac{322}{1125}a^3 - 17\frac{12517}{41850}a^2 - 59\frac{2629}{8370}a + \frac{49}{81}$$

$$490) \left(1\frac{14}{45}p - 57\right)\left(42\frac{44}{45}p^2 + \frac{1}{31}p - \frac{39}{40}\right)$$

$$56\frac{706}{2025}p^3 - 2449\frac{964}{1395}p^2 - 3\frac{2177}{18600}p + 55\frac{23}{40}$$

$$492) \left(24\frac{35}{96}x - 1\frac{37}{79}\right)\left(25\frac{13}{40}x^2 - 1\frac{3}{11}x - \frac{31}{86}\right)$$

$$-11\frac{78299767}{143489280}x^3 - 8\frac{2967557}{8968080}x^2 - 6\frac{6555793}{7174464}x + \frac{1798}{3397}$$

$$493) \left(1\frac{5}{6}m - 1\frac{1}{6}\right) \left(44\frac{32}{57}m^2 + 1\frac{8}{47}m - \frac{7}{12}\right)$$

$$81\frac{119}{171}m^3 - 49\frac{13549}{16074}m^2 - 2\frac{1471}{3384}m + \frac{49}{72}$$

$$495) \left(2\frac{14}{19}p + \frac{1}{6}\right) \left(1\frac{23}{27}p^2 + 32\frac{17}{48}p - 1\frac{7}{30}\right)$$

$$5\frac{35}{513}p^3 + 88\frac{5275}{6156}p^2 + 2\frac{463}{27360}p - \frac{37}{180}$$

$$497) \left(1\frac{8}{11}n + 50\frac{24}{35}\right) \left(\frac{3}{14}n^2 + 1\frac{10}{27}n + 38\frac{13}{35}\right)$$

$$\frac{57}{154}n^3 + 13\frac{16607}{72765}n^2 + 135\frac{7652}{10395}n + 1944\frac{1082}{1225}$$

$$499) \left(1\frac{6}{47}r + \frac{16}{21}\right) \left(\frac{80}{89}r^2 + 36\frac{4}{27}r + 32\frac{37}{82}\right)$$

$$1\frac{57}{4183}r^3 - 2\frac{70020862}{97242201}r^2 - 2\frac{22603109}{194484402}r + 2\frac{62319958}{97242201}17\frac{565}{3456}x^3 + 62\frac{11357}{24300}x^2 + 36\frac{1187}{11100}x + 9\frac{223}{925}$$

$$501) \left(\frac{1}{34}a - 1\frac{45}{49}\right) \left(1\frac{5}{23}a^2 + 45\frac{59}{68}a - 1\frac{16}{89}\right)$$

$$\frac{14}{391}a^3 - \frac{367153}{372232}a^2 + 4\frac{341909}{591583}a + 2\frac{164}{623}$$

$$503) \left(1\frac{13}{82}x + 48\frac{23}{36}\right) \left(50\frac{84}{97}x^2 + \frac{16}{63}x - 16\right)$$

$$58\frac{3699}{3977}x^3 - 382\frac{140821}{214758}x^2 - 6\frac{4274}{23247}x + 174\frac{261578}{2254959}20\frac{668}{3965}n^3 - 120\frac{1802}{11895}n^2 + 2\frac{49351}{83265}n - 39\frac{32}{35}$$

$$505) \left(42\frac{66}{89}x - \frac{7}{44}\right) \left(35\frac{16}{21}x^2 - 1\frac{1}{9}x + 9\frac{1}{10}\right)$$

$$-212\frac{120632}{308385}x^3 - 53\frac{705}{3916}x^2 + 389\frac{11021}{88110}x - 1\frac{197}{440}$$

$$20\frac{179}{194}n^3 + 20\frac{1837}{7372}n^2 - \frac{8229}{283822}n + \frac{8}{11}$$

$$507) \left(45\frac{3}{5}k + 11\frac{23}{24}\right) \left(2\frac{29}{36}k^2 - \frac{9}{25}k + 37\frac{43}{61}\right)$$

$$127\frac{14}{15}k^3 + 17\frac{14447}{108000}k^2 - 240\frac{425269}{549000}k - 201\frac{20581}{411750}1444\frac{580}{693}p^3 - 99\frac{25849}{92169}p^2 + 1277\frac{1598}{7315}p - 31\frac{1}{5}$$

$$509) \left(1\frac{9}{19}x + 1\frac{12}{17}\right) \left(1\frac{6}{35}x^2 - 1\frac{11}{16}x + 47\frac{80}{81}\right)$$

$$1\frac{69}{95}x^3 - \frac{22091}{45220}x^2 + 67\frac{351619}{418608}x + 81\frac{1186}{1377}$$

$$511) \left(\frac{17}{32}m + 16\frac{29}{38}\right) \left(1\frac{2}{5}m^2 + 31\frac{33}{38}m - 1\frac{7}{66}\right)$$

$$\frac{119}{160}m^3 + 40\frac{2423}{6080}m^2 + 533\frac{478639}{762432}m - 18\frac{1357}{2508}$$

$$494) \left(50\frac{3}{5}n + 12\frac{56}{69}\right) \left(1\frac{1}{11}n^2 + 2n + 35\frac{21}{31}\right)$$

$$55\frac{1}{5}n^3 + 115\frac{223}{1265}n^2 + 1830\frac{9632}{10695}n + 457\frac{181}{2139}$$

$$496) \left(75\frac{3}{25}x - 2\frac{3}{38}\right) \left(1\frac{31}{39}x^2 + 43\frac{1}{28}x - 2\frac{33}{53}\right)$$

$$-21\frac{211693}{528675}x^3 + 26\frac{5113301}{13745550}x^2 + 25\frac{7701961}{7854600}x + 5\frac{911}{2014}$$

$$498) \left(\frac{3}{5}b - \frac{76}{77}\right) \left(\frac{37}{45}b^2 + 1\frac{7}{13}b + 2\right)$$

$$\frac{37}{75}b^3 + \frac{5024}{45045}b^2 - \frac{1594}{5005}b - 1\frac{75}{77}$$

$$500) \left(47\frac{41}{54}x + \frac{8}{25}\right) \left(\frac{23}{64}x^2 + 1\frac{11}{36}x + 28\frac{65}{74}\right)$$

$$502) \left(12\frac{11}{76}v - 98\right) \left(21\frac{13}{93}v^2 + \frac{1}{4}v + 33\frac{7}{81}\right)$$

$$256\frac{2605}{3534}v^3 - 2068\frac{18737}{28272}v^2 + 377\frac{1003}{3078}v + 2384\frac{2240}{47709}$$

$$504) \left(\frac{32}{61}n - 3\frac{1}{7}\right) \left(38\frac{29}{65}n^2 + 1\frac{23}{78}n + 12\frac{7}{10}\right)$$

$$506) \left(1\frac{26}{97}n + 1\frac{3}{11}\right) \left(16\frac{1}{2}n^2 - \frac{45}{76}n + \frac{4}{7}\right)$$

$$508) \left(46\frac{8}{11}p - 1\frac{1}{7}\right) \left(30\frac{58}{63}p^2 - 1\frac{7}{19}p + 27\frac{3}{10}\right)$$

$$510) \left(23\frac{5}{26}n + 72\right) \left(13\frac{43}{91}n^2 - 1\frac{4}{5}n - 1\frac{71}{81}\right)$$

$$312\frac{543}{1183}n^3 + 928\frac{251}{910}n^2 - 173\frac{71}{585}n - 135\frac{1}{9}$$

$$512) \left(9\frac{21}{40}r - 22\right) \left(3\frac{7}{20}r^2 - 1\frac{3}{7}r - \frac{1}{4}\right)$$

$$31\frac{727}{800}r^3 - 87\frac{43}{140}r^2 + 29\frac{53}{1120}r + 5\frac{1}{2}$$

513)  $\left(\frac{37}{47}x + 44\frac{22}{23}\right)\left(1\frac{6}{11}x^2 + 30\frac{15}{62}x + 4\frac{19}{39}\right)$   
 $1\frac{112}{517}x^3 - 56\frac{85105}{927498}x^2 + 18\frac{10166776}{14376219}x + 52\frac{1679538}{4792073}$   
 $\frac{275}{432}n^3 + 56\frac{8245}{27216}n^2 + 88\frac{1651387}{2058210}n - 92\frac{327871}{411642}$

515)  $\left(14\frac{19}{60}b + 29\frac{29}{46}\right)\left(\frac{1}{2}b^2 + \frac{3}{14}b - \frac{19}{20}\right)$   
 $7\frac{19}{120}b^3 + 17\frac{5687}{6440}b^2 - 7\frac{48581}{193200}b - 28\frac{137}{920}$

517)  $\left(33\frac{61}{75}x + 20\frac{17}{20}\right)\left(15\frac{59}{63}x^2 - \frac{73}{80}x + 35\frac{13}{98}\right)$   
 $133\frac{3767}{55125}x^3 - 104\frac{124559}{330750}x^2 - 48\frac{1650661}{3528000}x - 79\frac{106399}{1324080}n^3 + \frac{117372}{540995}n^2 + 1\frac{45993}{170027}n + 2\frac{730}{1287}$

519)  $\left(36\frac{22}{89}a + \frac{8}{33}\right)\left(14\frac{16}{17}a^2 + 17\frac{3}{13}a + 11\frac{81}{100}\right)$   
 $12\frac{3450208}{16226925}a^3 - 33\frac{1670503}{3245385}a^2 + 35\frac{7600391}{32453850}a + 2\frac{712}{825}$

520)  $\left(37\frac{73}{96}k - 1\frac{3}{5}\right)\left(10\frac{17}{22}k^2 + 31\frac{5}{6}k + 1\frac{33}{73}\right)$   
 $406\frac{551}{704}k^3 - 672\frac{169819}{462528}k^2 + 3\frac{15713}{17520}k - 2\frac{118}{365}$

522)  $\left(\frac{3}{4}p + 1\frac{25}{34}\right)\left(4\frac{33}{68}p^2 - 1\frac{8}{75}p + 50\frac{27}{56}\right)$   
 $3\frac{99}{272}p^3 + 6\frac{55101}{57800}p^2 + 35\frac{268811}{285600}p + 87\frac{1145}{1904}$

524)  $\left(\frac{14}{39}x - \frac{67}{83}\right)\left(38\frac{33}{91}x^2 + 25\frac{2}{17}x + 31\frac{8}{51}\right)$   
 $13\frac{391}{507}x^3 - 21\frac{366266}{385203}x^2 - 9\frac{15052}{165087}x - 25\frac{638}{4233}$

526)  $\left(22\frac{7}{46}n + 20\frac{7}{17}\right)\left(2n^2 + 26\frac{13}{16}n + 11\frac{12}{67}\right)$   
 $44\frac{7}{23}n^3 + 634\frac{9743}{12512}n^2 + 794\frac{390611}{419152}n + 228\frac{211}{1139}$

528)  $\left(\frac{28}{61}r + 76\right)\left(1\frac{45}{67}r^2 + 6\frac{57}{58}r - 1\frac{1}{2}\right)$   
 $\frac{3136}{4087}r^3 + 130\frac{29628}{118523}r^2 + 530\frac{2}{1769}r - 114$

530)  $\left(1\frac{43}{54}b + 39\frac{40}{69}\right)\left(15\frac{4}{43}b^2 + 29\frac{10}{79}b + 7\frac{29}{38}\right)$   
 $\frac{2871419}{8906934}b^3 + 6\frac{6747709}{8906934}b^2 - 11\frac{51116585}{53441604}b + 12\frac{24587151949}{42190745106}n^3 - 640\frac{27502}{53613}n^2 - 324\frac{45484}{58275}n + 56\frac{8}{25}$

514)  $\left(\frac{49}{54}n + 6\frac{47}{66}\right)\left(1\frac{45}{56}n^2 + 48\frac{70}{99}n + 25\frac{2}{55}\right)$

516)  $\left(\frac{3}{34}v - 1\frac{19}{26}\right)\left(\frac{19}{46}v^2 + 21v - \frac{11}{25}\right)$   
 $\frac{57}{1564}v^3 + 1\frac{2807}{20332}v^2 - 36\frac{2127}{5525}v + \frac{99}{130}$

518)  $\left(\frac{6}{41}n + \frac{4}{13}\right)\left(\frac{22}{35}n^2 + \frac{14}{87}n + 8\frac{34}{99}\right)$

521)  $\left(10\frac{11}{12}x - 1\frac{3}{7}\right)\left(1\frac{12}{13}x^2 - \frac{1}{5}x + 26\frac{35}{68}\right)$   
 $20\frac{155}{156}x^3 - 4\frac{5081}{5460}x^2 + 289\frac{1405}{1904}x - 37\frac{209}{238}$

523)  $\left(1\frac{1}{9}n + 23\frac{36}{55}\right)\left(6\frac{65}{72}n^2 + 49\frac{63}{64}n + 33\frac{47}{84}\right)$   
 $7\frac{217}{324}n^3 + 218\frac{4331}{5280}n^2 - 932\frac{626083}{1995840}n + 793\frac{3859}{4620}$

525)  $\left(17\frac{19}{25}m - \frac{35}{48}\right)\left(23\frac{55}{87}m^2 + 1\frac{1}{3}m - \frac{1}{10}\right)$   
 $419\frac{513}{725}m^3 + 6\frac{5849}{13050}m^2 - 2\frac{3367}{4500}m + \frac{7}{96}$

527)  $\left(\frac{26}{33}p + \frac{13}{20}\right)\left(6\frac{43}{46}p^2 + 4\frac{1}{6}p + 43\frac{23}{66}\right)$   
 $5\frac{32}{69}p^3 + 7\frac{71993}{91080}p^2 + 36\frac{7507}{8712}p + 28\frac{233}{1320}$

529)  $\left(\frac{36}{67}x + 42\frac{5}{56}\right)\left(\frac{37}{65}x^2 + 1\frac{11}{54}x - 56\right)$   
 $\frac{1332}{4355}x^3 + 24\frac{442849}{731640}x^2 + 20\frac{116191}{202608}x - 74\frac{11099}{117585}$

531)  $\left(27\frac{23}{74}n - 88\right)\left(8\frac{25}{69}n^2 + 3\frac{31}{63}n - \frac{16}{25}\right)$

$$532) \left(6\frac{55}{82}a + 74\right)\left(12\frac{3}{10}a^2 + 35\frac{5}{66}a - \frac{2}{13}\right)$$

$$82\frac{1}{20}a^3 + 1144\frac{4897}{27060}a^2 + 2594\frac{10198}{17589}a - 11\frac{5}{13}$$

$$534) \left(32\frac{51}{95}x - 40\right)\left(1\frac{7}{29}x^2 - 45\frac{21}{88}x + \frac{11}{12}\right)$$

$$40\frac{1076}{2755}x^3 - 1521\frac{12729}{22040}x^2 + 1839\frac{4651}{12540}x - 36\frac{2}{3}$$

$$536) \left(\frac{2}{11}n - 1\frac{13}{14}\right)\left(25n^2 + 1\frac{55}{76}n + 3\frac{1}{10}\right)$$

$$4\frac{6}{11}n^3 - 47\frac{1318}{1463}n^2 - 2\frac{44511}{58520}n - 5\frac{137}{140}$$

$$538) \left(1\frac{11}{18}k + 72\frac{13}{80}\right)\left(1\frac{67}{75}k^2 - \frac{17}{89}k - \frac{33}{76}\right)$$

$$3\frac{34}{675}k^3 - 4\frac{11954689}{15219000}k^2 - 2\frac{66168251}{91314000}k + 3\frac{1147685768}{12175200625}p^3 + \frac{1006}{17325}p^2 - \frac{37507}{44550}p + \frac{70}{99}$$

$$540) \left(2n + 46\frac{41}{86}\right)\left(2n^2 + 56n + 1\frac{7}{22}\right)$$

$$4n^3 + 204\frac{41}{43}n^2 + 2605\frac{158}{473}n + 61\frac{501}{1892}$$

$$542) \left(x + 35\frac{15}{16}\right)\left(\frac{1}{13}x^2 - 1\frac{1}{5}x + 44\frac{29}{45}\right)$$

$$\frac{1}{13}x^3 + 1\frac{587}{1040}x^2 + 1\frac{187}{360}x + 1604\frac{59}{144}$$

$$544) \left(20\frac{35}{68}n + 3\frac{21}{41}\right)\left(1\frac{14}{23}n^2 + 23\frac{20}{87}n - 100\frac{39}{50}\right)$$

$$-13\frac{8859073}{46489900}n^3 + 20\frac{2599159}{9297980}n^2 + \frac{2145929}{5469400}n + 15\frac{6750259}{11622475}$$

$$545) \left(\frac{25}{74}b - \frac{2}{3}\right)\left(1\frac{50}{53}b^2 + 18\frac{58}{75}b + 1\frac{44}{79}\right)$$

$$\frac{2575}{3922}b^3 + 5\frac{275}{5883}b^2 - 11\frac{1301611}{1315350}b - 1\frac{3}{79}$$

$$547) \left(\frac{39}{44}x + 1\frac{71}{87}\right)\left(\frac{8}{25}x^2 + 27\frac{19}{86}x + 35\frac{13}{42}\right)$$

$$\frac{78}{275}x^3 - \frac{977719}{6913368}x^2 + 6\frac{3497793}{19203800}x - 10\frac{9188461}{21604275}$$

$$549) \left(2\frac{1}{3}a + 29\frac{69}{88}\right)\left(49\frac{53}{90}a^2 - 1\frac{2}{41}a + 46\frac{77}{87}\right)$$

$$-36\frac{1141993}{3531330}a^3 - 45\frac{22463299}{28250640}a^2 - 73\frac{12279173}{14125320}a + 28\frac{2191637}{25042680} + 37\frac{67}{425}k^2 + 15\frac{61}{85}k - 44\frac{116}{153}$$

$$533) \left(1\frac{57}{89}v + 2\frac{22}{85}\right)\left(43\frac{5}{12}v^2 - \frac{4}{49}v - \frac{10}{17}\right)$$

$$-42\frac{4675397}{12603290}v^3 - 15\frac{12423167}{18904935}v^2 - 1\frac{55367}{370685}v - 1\frac{95}{289}$$

$$535) \left(7\frac{1}{4}x + 1\frac{2}{17}\right)\left(46\frac{33}{40}x^2 + 38\frac{11}{12}x - \frac{25}{68}\right)$$

$$339\frac{77}{160}x^3 + 334\frac{1957}{4080}x^2 + 40\frac{677}{816}x - \frac{475}{1156}$$

$$537) \left(23\frac{21}{32}x - \frac{28}{73}\right)\left(25\frac{14}{27}x^2 - 1\frac{5}{18}x - 1\frac{28}{73}\right)$$

$$137\frac{398599}{1534752}x^3 - 40\frac{1937}{126144}x^2 - 32\frac{5041}{21024}x + \frac{2828}{5329}$$

$$539) \left(\frac{23}{25}p + 1\frac{41}{99}\right)\left(\frac{16}{25}p^2 - \frac{58}{63}p + \frac{1}{2}\right)$$

$$-24\frac{2970379}{18735235}r^3 + 35\frac{1592336}{11241141}r^2 + 3\frac{45692134}{56205705}r - 37\frac{3}{18}$$

$$541) \left(17\frac{37}{53}r + \frac{58}{61}\right)\left(50\frac{17}{38}r^2 - 43\frac{55}{61}r + 41\frac{13}{30}\right)$$

$$2\frac{203}{276}m^3 + \frac{38297}{94392}m^2 + 97\frac{33478}{71415}m - 15\frac{661}{2484}$$

$$543) \left(16\frac{19}{46}m + \frac{13}{36}\right)\left(\frac{1}{6}m^2 + \frac{2}{95}m - 42\frac{19}{69}\right)$$

$$178\frac{518}{5265}v^3 + 149\frac{20317}{24570}v^2 + 112\frac{9227}{21060}v + 111\frac{33}{980}$$

$$546) \left(9\frac{67}{81}v + 8\frac{25}{28}\right)\left(18\frac{8}{65}v^2 - 1\frac{2}{13}v + 12\frac{17}{35}\right)$$

$$\frac{255}{2784}n^3 - 44\frac{12979}{75168}n^2 - 52\frac{419}{1728}n + 84$$

$$548) \left(\frac{25}{96}n - 56\right)\left(\frac{23}{29}n^2 + \frac{25}{27}n - 1\frac{1}{2}\right)$$

$$550) \left(\frac{3}{5}k + 25\frac{3}{17}\right)\left(1\frac{23}{50}k^2 + \frac{2}{3}k - 1\frac{7}{9}\right)$$

$$-36\frac{1141993}{3531330}a^3 - 45\frac{22463299}{28250640}a^2 - 73\frac{12279173}{14125320}a + 28\frac{2191637}{25042680} + 37\frac{67}{425}k^2 + 15\frac{61}{85}k - 44\frac{116}{153}$$

$$551) \left(4\frac{7}{18}p - \frac{1}{2}\right) \left(39\frac{41}{63}p^2 + 1\frac{2}{5}p + 34\frac{13}{84}\right)$$

$$174\frac{13}{567}p^3 - 13\frac{143}{210}p^2 + 149\frac{1523}{7560}p - 17\frac{13}{168}$$

$$553) \left(7\frac{12}{31}n - 1\frac{28}{47}\right) \left(34\frac{43}{70}n^2 + 6\frac{6}{65}n - \frac{31}{81}\right)$$

$$15\frac{26728957}{35798490}n^3 - 10\frac{306403}{1325870}n^2 - 12\frac{27167}{49491}n + \frac{775}{1269}$$

$$19\frac{399}{1079}m^3 + 17\frac{2809}{4316}m^2 + 1\frac{3841}{5148}m - \frac{43}{825}$$

$$555) \left(\frac{15}{46}r - 1\frac{9}{11}\right) \left(\frac{7}{27}r^2 + 41\frac{56}{97}r - 85\right)$$

$$\frac{35}{414}r^3 + 13\frac{114553}{1325214}r^2 - 103\frac{15339}{49082}r + 154\frac{6}{11}$$

$$557) \left(1\frac{1}{5}n - \frac{1}{2}\right) \left(\frac{61}{70}n^2 + \frac{14}{25}n + 25\frac{2}{7}\right)$$

$$1\frac{8}{175}n^3 + \frac{827}{3500}n^2 + 30\frac{11}{175}n - 12\frac{9}{14}$$

$$559) \left(1\frac{51}{74}r + 44\frac{3}{5}\right) \left(1\frac{14}{15}r^2 - \frac{3}{5}r - 1\frac{23}{25}\right)$$

$$3\frac{59}{222}r^3 + 85\frac{1183}{5550}r^2 - 30\frac{3}{925}r - 85\frac{79}{125}$$

$$561) \left(44\frac{69}{88}n + 1\frac{3}{64}\right) \left(1\frac{3}{4}n^2 + 1\frac{21}{34}n + \frac{2}{13}\right)$$

$$78\frac{131}{352}n^3 + 74\frac{1205}{4352}n^2 + 8\frac{181515}{311168}n + \frac{67}{416}$$

$$563) \left(13v + 35\frac{33}{70}\right) \left(\frac{2}{9}v^2 + 43\frac{73}{83}v - \frac{7}{29}\right)$$

$$2\frac{8}{9}v^3 + 578\frac{8269}{26145}v^2 - 1278\frac{150826}{151641}v - 8\frac{163}{290}$$

$$565) \left(46\frac{13}{17}x + \frac{14}{23}\right) \left(1\frac{1}{59}x^2 + 1\frac{22}{81}x + \frac{21}{38}\right)$$

$$-12\frac{33008456}{35503191}x^3 - \frac{620251}{1543617}x^2 + 26\frac{743369}{1203498}x + \frac{147}{437}$$

$$49\frac{857}{2088}n^3 + 18\frac{2003633}{3424320}n^2 - 29\frac{9209}{21648}n + \frac{49}{410}$$

$$567) \left(1\frac{1}{16}k + 7\right) \left(28\frac{41}{90}k^2 - 1\frac{11}{29}k + \frac{27}{31}\right)$$

$$30\frac{337}{1440}k^3 + 197\frac{944}{1305}k^2 - 8\frac{10497}{14384}k + 6\frac{3}{31}$$

$$569) \left(30\frac{43}{45}x + 37\frac{52}{81}\right) \left(48\frac{11}{29}x^2 + \frac{11}{16}x - \frac{1}{3}\right)$$

$$1497\frac{794}{1305}x^3 + 1842\frac{70423}{187920}x^2 + 15\frac{3631}{6480}x - 12\frac{133}{243}$$

$$552) \left(86x - 1\frac{12}{43}\right) \left(37\frac{23}{31}x^2 + \frac{3}{4}x + \frac{33}{41}\right)$$

$$3245\frac{25}{31}x^3 + 16\frac{601}{2666}x^2 + 68\frac{1835}{7052}x - 1\frac{52}{1763}$$

$$554) \left(\frac{25}{39}m + \frac{1}{11}\right) \left(30\frac{18}{83}m^2 + 23\frac{1}{4}m - \frac{43}{75}\right)$$

$$556) \left(37\frac{35}{52}x - \frac{14}{17}\right) \left(\frac{3}{17}x^2 - 52x + 17\frac{59}{66}\right)$$

$$6\frac{573}{884}x^3 - 1959\frac{42}{289}x^2 + 716\frac{18345}{19448}x - 14\frac{413}{561}$$

$$558) \left(40\frac{54}{67}b + 1\frac{63}{95}\right) \left(43\frac{37}{62}b^2 + 37\frac{43}{70}b + 5\right)$$

$$-86\frac{5105413}{6906025}b^3 - 258\frac{2432278}{6906025}b^2 + 266\frac{131069}{222775}b + 8\frac{6}{19}$$

$$560) \left(\frac{2}{3}x + 4\frac{11}{47}\right) \left(33x^2 + 27\frac{5}{22}x + \frac{10}{13}\right)$$

$$22x^3 + 157\frac{1357}{1551}x^2 + 115\frac{32029}{40326}x + 3\frac{157}{611}$$

$$562) \left(\frac{1}{5}a + \frac{9}{17}\right) \left(29\frac{89}{92}a^2 + 12\frac{17}{46}a - 2\frac{25}{36}\right)$$

$$5\frac{457}{460}a^3 + 18\frac{2651}{7820}a^2 + 6\frac{683}{70380}a - 1\frac{29}{68}$$

$$564) \left(1\frac{4}{5}x - 1\frac{7}{10}\right) \left(\frac{71}{81}x^2 + 34\frac{17}{21}x + 1\frac{7}{16}\right)$$

$$1\frac{26}{45}x^3 + 61\frac{947}{5670}x^2 - 56\frac{989}{1680}x - 2\frac{71}{160}$$

$$566) \left(38\frac{1}{24}n - \frac{1}{5}\right) \left(1\frac{26}{87}n^2 + 33\frac{41}{88}n - \frac{49}{82}\right)$$

$$-116\frac{2916715}{6608238}p^3 - 109\frac{4024987}{6608238}p^2 + 100\frac{386615}{472017}p + 2\frac{7}{4}$$

$$568) \left(28\frac{3}{38}p + 1\frac{27}{91}\right) \left(19p^2 + 41\frac{20}{39}p + 1\frac{33}{49}\right)$$

$$570) \left(\frac{45}{53}n + 32\frac{31}{78}\right) \left(\frac{3}{13}n^2 - 1\frac{13}{22}n - 51\right)$$

$$\frac{135}{689}n^3 + 6\frac{12371}{98527}n^2 - 94\frac{76693}{90948}n - 1652\frac{7}{26}$$

$$571) \left(4\frac{53}{60}m + 31\frac{73}{93}\right)\left(31\frac{44}{53}m^2 - \frac{1}{7}m + \frac{5}{33}\right)$$

$$-33\frac{774821}{4554396}m^3 + 67\frac{22441333}{22771980}m^2 - 3\frac{68815}{85932}m + 4\frac{25044751}{30629086}m^3 - \frac{75281}{444288}m^2 + 3\frac{318901189}{469168128}m + 3\frac{12512561}{14661504}$$

$$573) \left(40n - 1\frac{29}{54}\right)\left(38\frac{19}{44}n^2 - 74n + 19\frac{49}{78}\right)$$

$$1537\frac{3}{11}n^3 - 3019\frac{169}{2376}n^2 + 898\frac{305}{351}n - 30\frac{713}{4212}$$

$$575) \left(\frac{34}{87}b - 90\right)\left(\frac{26}{95}b^2 - 1\frac{29}{40}b - \frac{13}{27}\right)$$

$$\frac{884}{8265}b^3 - 25\frac{3369}{11020}b^2 + 155\frac{581}{9396}b + 43\frac{1}{3}$$

$$577) \left(1\frac{2}{3}x - 1\frac{9}{80}\right)\left(1\frac{13}{30}x^2 + 43\frac{67}{99}x - 48\right)$$

$$2\frac{7}{18}x^3 + 71\frac{47527}{237600}x^2 - 128\frac{1169}{1980}x + 53\frac{2}{5}$$

$$579) \left(\frac{7}{17}a + 40\frac{7}{66}\right)\left(\frac{2}{25}a^2 + 19\frac{55}{82}a + 1\frac{6}{7}\right)$$

$$\frac{14}{425}a^3 + 11\frac{354443}{1150050}a^2 - 10\frac{9489863}{16100700}a + 74\frac{223}{462}$$

$$581) \left(21\frac{28}{31}p + \frac{8}{19}\right)\left(\frac{13}{41}p^2 + \frac{14}{71}p + 50\frac{68}{81}\right)$$

$$6\frac{1201}{1271}p^3 + 4\frac{775762}{1714579}p^2 + \frac{43419554}{138880899}p - 9\frac{24046567}{46293633}\frac{62450135}{86113776}x^3 - 3\frac{76908173}{344455104}x^2 + 1\frac{232837}{5382111}x + 3\frac{44014}{53821}$$

$$583) \left(24\frac{43}{45}n + 13\frac{8}{37}\right)\left(31\frac{77}{81}n^2 + \frac{3}{26}n + 9\frac{14}{47}\right)$$

$$-10\frac{8940254}{16480503}n^3 + 8\frac{5648335}{32961006}n^2 - \frac{18120793}{18311670}n - 7\frac{6951566}{16480203}n^3 + 1381\frac{101}{465}n^2 - 3090\frac{2368}{2883}n - 11\frac{19}{31}$$

$$585) \left(92\frac{4}{59}r - 1\frac{15}{16}\right)\left(19\frac{11}{39}r^2 + 1\frac{58}{71}r + 9\frac{3}{7}\right)$$

$$-102\frac{219782}{381199}r^3 - 104\frac{308745}{381199}r^2 - 74\frac{6746581}{18297552}r - 18\frac{12624}{56551}x^3 + 56\frac{26664}{110081}x^2 - 66\frac{83257}{143313}x + 81\frac{1367}{4623}$$

$$587) \left(1\frac{70}{73}n - 1\frac{8}{11}\right)\left(1\frac{2}{5}n^2 + \frac{14}{19}n + 33\frac{25}{96}\right)$$

$$2\frac{271}{365}n^3 - \frac{74361}{76285}n^2 + 63\frac{67933}{77088}n - 57\frac{475}{1056}$$

$$589) \left(1\frac{1}{44}r + 35\frac{89}{96}\right)\left(11\frac{51}{95}r^2 + \frac{13}{24}r + 8\frac{13}{49}\right)$$

$$11\frac{167}{209}r^3 + 14\frac{450479}{776160}r^2 - 8\frac{1183799}{2407680}r + 5\frac{10406579}{14747040}$$

$$572) \left(\frac{23}{66}r + 6\frac{59}{64}\right)\left(26\frac{85}{89}r^2 + 15\frac{49}{64}r + 38\frac{71}{78}\right)$$

$$-33\frac{774821}{4554396}m^3 + 67\frac{22441333}{22771980}m^2 - 3\frac{68815}{85932}m + 4\frac{25044751}{30629086}m^3 - \frac{75281}{444288}m^2 + 3\frac{318901189}{469168128}m + 3\frac{12512561}{14661504}$$

$$574) \left(24\frac{61}{74}x + \frac{65}{93}\right)\left(\frac{3}{7}x^2 + 78x + 10\frac{49}{78}\right)$$

$$10\frac{331}{518}x^3 - 349\frac{409979}{939393}x^2 + 318\frac{63367}{178932}x + 7\frac{239}{558}$$

$$576) \left(40\frac{41}{95}v + 25\frac{8}{9}\right)\left(1\frac{51}{86}v^2 + 6\frac{1}{4}v + \frac{2}{37}\right)$$

$$64\frac{3337}{8170}v^3 + 293\frac{27617}{29412}v^2 + 163\frac{125407}{126540}v + 1\frac{133}{333}$$

$$578) \left(17\frac{7}{10}n - \frac{10}{11}\right)\left(27\frac{2}{41}n^2 + 46\frac{13}{30}n + 38\frac{25}{26}\right)$$

$$478\frac{313}{410}n^3 + 797\frac{12637}{45100}n^2 + 647\frac{3493}{8580}n - 35\frac{60}{143}$$

$$580) \left(19\frac{13}{24}k - 3\frac{14}{67}\right)\left(45\frac{17}{41}k^2 - 2k - 1\frac{4}{21}\right)$$

$$887\frac{235}{492}k^3 - 184\frac{26927}{32964}k^2 - 16\frac{4081}{4824}k + 3\frac{1154}{1407}$$

$$582) \left(\frac{6}{19}x + 44\frac{3}{94}\right)\left(44\frac{91}{96}x^2 + \frac{24}{41}x + \frac{32}{49}\right)$$

$$-9\frac{24046567}{46293633}\frac{62450135}{86113776}x^3 - 3\frac{76908173}{344455104}x^2 + 1\frac{232837}{5382111}x + 3\frac{44014}{53821}$$

$$584) \left(86m + \frac{10}{31}\right)\left(1\frac{21}{25}m^2 + 16\frac{5}{93}m - 36\right)$$

$$-10\frac{8940254}{16480503}n^3 + 8\frac{5648335}{32961006}n^2 - \frac{18120793}{18311670}n - 7\frac{6951566}{16480203}n^3 + 1381\frac{101}{465}n^2 - 3090\frac{2368}{2883}n - 11\frac{19}{31}$$

$$586) \left(1\frac{28}{67}x + 47\frac{36}{67}\right)\left(1\frac{12}{53}x^2 - 1\frac{14}{31}x + 1\frac{49}{69}\right)$$

$$-102\frac{219782}{381199}r^3 - 104\frac{308745}{381199}r^2 - 74\frac{6746581}{18297552}r - 18\frac{12624}{56551}x^3 + 56\frac{26664}{110081}x^2 - 66\frac{83257}{143313}x + 81\frac{1367}{4623}$$

$$588) \left(44\frac{39}{80}b + 11\frac{6}{49}\right)\left(\frac{4}{55}b^2 - 30b + 29\frac{31}{68}\right)$$

$$3\frac{259}{1100}b^3 + 130\frac{353037}{366520}b^2 + 97\frac{1837861}{2094400}b + 34\frac{609969}{916300}$$

$$590) \left(11\frac{49}{94}x + 22\frac{31}{54}\right)\left(21\frac{11}{12}x^2 - \frac{1}{11}x - 3\frac{1}{18}\right)$$

$$252\frac{191}{376}x^3 + 493\frac{234869}{335016}x^2 - 37\frac{14299}{55836}x - 68\frac{949}{972}$$

$$591) \left(1\frac{1}{2}n - \frac{40}{41}\right) \left(23\frac{2}{83}n^2 + 5\frac{77}{90}n - \frac{2}{87}\right)$$

$$34\frac{89}{166}n^3 - 13\frac{138679}{204180}n^2 - 5\frac{7996}{10701}n + \frac{80}{3567}$$

$$592) \left(11\frac{1}{10}a + 9\frac{3}{43}\right) \left(1\frac{1}{2}a^2 + 24\frac{11}{13}a - 1\frac{6}{71}\right)$$

$$16\frac{13}{20}a^3 + 289\frac{2219}{5590}a^2 + 213\frac{9489}{30530}a - 9\frac{2553}{3053}$$

$$593) \left(12\frac{5}{17}v + 8\frac{5}{33}\right) \left(44\frac{17}{20}v^2 + \frac{69}{91}v - 1\frac{32}{37}\right)$$

$$-130\frac{9461691}{12592580}v^3 + 33\frac{10654513}{12592580}v^2 - 16\frac{469734}{629629}v - 15\frac{1682}{1807}v^3 - 12\frac{7}{552}v^2 - 2\frac{213}{1541}v - 39\frac{33}{67}$$

$$595) \left(13x + 7\frac{62}{77}\right) \left(\frac{4}{13}x^2 + 1\frac{23}{60}x - 79\right)$$

$$4x^3 + 20\frac{23119}{60060}x^2 - 1016\frac{937}{4620}x - 616\frac{47}{77}$$

$$594) \left(1\frac{12}{23}x - 21\right) \left(\frac{33}{56}x^2 + \frac{5}{21}x + 1\frac{59}{67}\right)$$

$$4\frac{387}{874}n^3 + 9\frac{7980121}{44539040}n^2 - 2\frac{9734591}{178156160}n - 5\frac{1215631}{1391845}$$

$$597) \left(18\frac{11}{45}k + 34\frac{62}{91}\right) \left(1\frac{2}{25}k^2 + 48\frac{13}{28}k - \frac{88}{89}\right)$$

$$2\frac{55412657}{63779625}k^3 - 4\frac{936847}{3401580}k^2 - 3\frac{1194224}{1301625}k - \frac{396243549}{6377962588}p^3 + 4\frac{42167}{248064}p^2 + 1\frac{177581}{406980}p + 71\frac{2}{45}$$

$$599) \left(\frac{40}{59}x + 14\frac{23}{28}\right) \left(\frac{5}{7}x^2 + 1\frac{64}{85}x + \frac{41}{60}\right)$$

$$\frac{200}{413}x^3 + 11\frac{152389}{196588}x^2 + 26\frac{37439}{84252}x + 10\frac{43}{336}$$

$$598) \left(\frac{7}{17}p + 38\frac{5}{84}\right) \left(\frac{7}{64}p^2 + \frac{1}{57}p + 1\frac{13}{15}\right)$$

$$600) \left(49\frac{5}{66}n + 49\frac{19}{28}\right) \left(1\frac{2}{17}n^2 - \frac{29}{91}n + 37\frac{25}{36}\right)$$

$$-28\frac{3948431}{6432426}n^3 + 39\frac{180431}{204204}n^2 - 2\frac{3571303}{25729704}n + 36\frac{1944}{4678}$$