

Polynomials - single variable - fractions

Simplify each difference.

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

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

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

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

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

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

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

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

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

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

$$11) \left(\frac{1}{6}a^3 - 2\frac{1}{3}a^4 \right) - \left(\frac{3}{7}a^3 + 1\frac{2}{3}a^4 \right)$$

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

$$13) \left(\frac{1}{2} + \frac{3}{4}b^2 \right) - \left(\frac{7}{8}b^2 - 1 \right)$$

$$14) \left(4\frac{1}{5}r + 4 \right) - \left(4\frac{3}{5}r^4 + 4\frac{2}{3} \right)$$

$$15) \left(1\frac{3}{7} - 3\frac{4}{5}a \right) - \left(3\frac{1}{6} - 3\frac{3}{4}a \right)$$

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

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

$$18) \left(\frac{1}{5}x - 8x^3 \right) - \left(2\frac{1}{2}x - 1\frac{2}{3}x^3 \right)$$

$$19) \left(4\frac{6}{7}p^2 - 3\frac{3}{5}p^4\right) - \left(2\frac{4}{5}p^2 - 1\frac{1}{2}p^4\right)$$

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

$$21) (6 + r^2) - \left(4\frac{2}{3}r^2 - 2\frac{1}{2}\right)$$

$$22) \left(3\frac{1}{8}n^2 + \frac{1}{4}n^4\right) - \left(7n^2 - 2\frac{1}{5}n\right)$$

$$23) \left(\frac{7}{8} + 2\frac{1}{3}m^2\right) - \left(\frac{1}{2} - 1\frac{1}{3}m^2\right)$$

$$24) \left(1\frac{1}{2}n^4 + 2n^3\right) - \left(2\frac{5}{6}n^3 + 7n^4\right)$$

$$25) \left(2\frac{3}{7}n^3 + 1\frac{1}{3}n^2 \right) - \left(1\frac{1}{2}n^3 - \frac{1}{4}n^2 \right)$$

$$26) \left(3\frac{5}{6}v^3 - 1\frac{3}{5}v \right) - \left(1\frac{1}{7}v^3 - 2v \right)$$

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

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

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

$$30) \left(7\frac{1}{2}x^4 - 1\frac{1}{2}x \right) - \left(1\frac{1}{2}x^4 + 1\frac{1}{6}x \right)$$

Answers to Polynomials - single variable - fractions

1) $1\frac{3}{35}n - 2\frac{1}{7}$

2) $-\frac{2}{5}p^3 - 2\frac{1}{20}p^2$

3) $-\frac{4}{15}x^4 - \frac{3}{5}x^2$

4) $-2\frac{29}{35}m^2 - \frac{2}{7}$

5) $-3\frac{13}{14}x^3 + 3\frac{1}{8}x$

6) $n^4 - n^3$

7) $4\frac{3}{40}r^3 - \frac{4}{5}r$

8) $2\frac{7}{12}x^3 + 2\frac{1}{4}$

9) $b^4 - \frac{1}{6}b$

10) $-1\frac{7}{20}x^2 + \frac{1}{2}$

11) $-4a^4 - \frac{11}{42}a^3$

12) $-x^4 + \frac{1}{6}x^2 + 2\frac{1}{4}x$

13) $-\frac{1}{8}b^2 + 1\frac{1}{2}$

14) $-4\frac{3}{5}r^4 + 4\frac{1}{5}r - \frac{2}{3}$

15) $-\frac{1}{20}a - 1\frac{31}{42}$

16) $3\frac{2}{15}m^4 - 1\frac{3}{4}m$

17) $1\frac{7}{15}v^3 - 2\frac{45}{56}$

18) $-6\frac{1}{3}x^3 - 2\frac{3}{10}x$

19) $-2\frac{1}{10}p^4 + 2\frac{2}{35}p^2$

20) $-3\frac{1}{12}x^3 - \frac{11}{30}x$

21) $-3\frac{2}{3}r^2 + 8\frac{1}{2}$

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

23) $3\frac{2}{3}m^2 + \frac{3}{8}$

24) $-5\frac{1}{2}n^4 - \frac{5}{6}n^3$

25) $\frac{13}{14}n^3 + 1\frac{7}{12}n^2$

26) $2\frac{29}{42}v^3 + \frac{2}{5}v$

27) $-4\frac{1}{12}a^4 - 1\frac{13}{20}a^2$

28) $-\frac{1}{2}x^3 + 1\frac{3}{20}x^2$

29) $2\frac{1}{21}p^2 - \frac{1}{2}$

30) $6x^4 - 2\frac{2}{3}x$