

Multiplying polynomials - Integers - Simplify product of monomials and trinomials

Simplify integer product with two variables:

1) $5(4x^2 + 5xy - 2y^2)$

2) $7(4m^2 + 4mn - 4n^2)$

3) $2(5x^2 + 4xy - 8y^2)$

4) $6u^3(5u^2 - 3uv - 6v^2)$

5) $4y(4x^2 - 6xy + 6y^2)$

6) $3y(3x^2 + 2xy - 8y^2)$

7) $3(3u^2 - 2uv - 3v^2)$

8) $8ab(7a^2 + 7ab - 2b^2)$

9) $6(x^2 + 3xy - 7y^2)$

10) $2xy^5(4x^2 - 8xy + 5y^2)$

11) $5(4a^2 - 7ab + 4b^2)$

12) $7y(2x^2 + 6xy + 2y^2)$

13) $2n(2m^2 + 7mn + 3n^2)$

14) $4(6x^2 - 8xy - y^2)$

15) $6(7m^2 - 8mn + n^2)$

16) $8(2x^2 + 2xy - 7y^2)$

17) $3mn^2(4m^2 - 2mn + 7n^2)$

18) $6(x^2 - xy + 5y^2)$

19) $8(2x^2 + 7xy - y^2)$

20) $3u^2v(6u^2 + 3uv + 8v^2)$

21) $5xy(7x^2 + 3xy - y^2)$

22) $2(5x^2 - 2xy - 5y^2)$

23) $8(4u^2 - 2uv - 6v^2)$

24) $4(6a^2 - 3ab - 3b^2)$

$$25) \ 8(7x^2 - 3xy + 6y^2)$$

$$26) \ 6b^2(3a^2 + 2ab - 8b^2)$$

$$27) \ 7m^2(7m^2 - 3mn + 4n^2)$$

$$28) \ 5(3x^2 - 5xy - 6y^2)$$

$$29) \ 3x^2(8x^2 - xy - 2y^2)$$

$$30) \ 3(2m^2 + 4mn - 3n^2)$$

$$31) \ 2(5x^2 + 3xy + y^2)$$

$$32) \ 8m(2m^2 - mn - 7n^2)$$

$$33) \ 6x(8x^2 - 2xy + 4y^2)$$

$$34) \ 5(6x^2 + 3xy + 2y^2)$$

$$35) \ 8v^2(6u^2 + 5uv + 4v^2)$$

$$36) \ 3xy(4x^2 + 5xy - 6y^2)$$

$$37) \ 4(8u^2 - 7uv - 2v^2)$$

$$38) \ 7xy(x^2 + 7xy + 5y^2)$$

$$39) \ 6(3a^2 - 8ab + 3b^2)$$

$$40) \ 4(2x^2 - 8xy + 2y^2)$$

$$41) \ 2(4a^2 + ab + 4b^2)$$

$$42) \ 8xy(4x^2 - 6xy + 5y^2)$$

$$43) \ 3m^2n^3(7m^2 + 3mn + n^2)$$

$$44) \ 5(6x^2 - xy + 8y^2)$$

$$45) \ 8(6m^2 - mn - 8n^2)$$

$$46) \ 2(8x^2 - 2xy + 2y^2)$$

$$47) \ 4(8m^2 - 2mn + 3n^2)$$

$$48) \ 8(6x^2 + 6xy - 3y^2)$$

$$49) \ 7x(3x^2 + 5xy + 6y^2)$$

$$50) \ 4v^3(7u^2 + 6uv + 2v^2)$$

$$51) \ 8(6u^2 - 7uv + 4v^2)$$

$$52) \ 3x(6x^2 + xy + 2y^2)$$

$$53) \ 6y^2(4x^2 + xy + 8y^2)$$

$$54) \ 5ab(4a^2 + 7ab + 6b^2)$$

$$55) \ 6(5x^2 - 2xy + 3y^2)$$

$$56) \ 2(7a^2 + 4ab + 7b^2)$$

$$57) \ 5(8x^2 + 3xy - 8y^2)$$

$$58) \ 8n^2(8m^2 - 6mn + 7n^2)$$

$$59) \ 4m(2m^2 - 4mn + 4n^2)$$

$$60) \ 7(3x^2 - 7xy - 3y^2)$$

$$61) \ 6x(7x^2 + 7xy + 2y^2)$$

$$62) \ 4y^3(6x^2 + 6xy - 2y^2)$$

$$63) \ 3(4x^2 - 7xy - 6y^2)$$

$$64) \ 6x(4x^2 + 2xy + 8y^2)$$

$$65) \ 2y^3(4x^2 + 7xy + 5y^2)$$

$$66) \ 4(6u^2 + 3uv + 5v^2)$$

$$67) \ 6(8u^2 - 8uv - 3v^2)$$

$$68) \ 8(7x^2 - xy + 4y^2)$$

$$69) \ 2(a^2 + ab + 3b^2)$$

$$70) \ 4x(3x^2 + 2xy - 3y^2)$$

$$71) \ 7(3a^2 - ab + 3b^2)$$

$$72) \ 2(8x^2 + 4xy + 8y^2)$$

$$73) \ 3n(2m^2 + 6mn + 4n^2)$$

$$74) \ 6y^2(2x^2 + xy + 8y^2)$$

$$75) \ 6mn(5m^2 + 8mn - 4n^2)$$

$$76) \ 2x(x^2 - 7xy - 5y^2)$$

$$77) \ 6(8x^2 + 5xy + 3y^2)$$

$$78) \ 8(8x^2 + 4xy - 3y^2)$$

$$79) \ 2(x^2 + 5xy + 6y^2)$$

$$80) \ 5uv(3u^2 + 8uv - 4v^2)$$

$$81) \ 7x^2(2x^2 + 4xy + 4y^2)$$

$$82) \ 8u^3(3u^2 + 8uv - 2v^2)$$

$$83) \ 7(5a^2 + 3ab - 4b^2)$$

$$84) \ 4(4x^2 + 3xy - 6y^2)$$

$$85) \ 7(x^2 - 3xy + 8y^2)$$

$$86) \ 3a(4a^2 - ab + 5b^2)$$

$$87) \ 6xy(x^2 + 2xy + 5y^2)$$

$$88) \ 8n(m^2 + 7mn + 2n^2)$$

$$89) \ 3y(3x^2 - 6xy + 4y^2)$$

$$90) \ 5mn(7m^2 + mn + n^2)$$

$$91) \ 7xy(5x^2 - 3xy + 5y^2)$$

$$92) \ 2x(2x^2 - 2xy - 6y^2)$$

$$93) \ 4(5x^2 + 8xy + 5y^2)$$

$$94) \ 7(5x^2 - xy + y^2)$$

$$95) \ 3y(5x^2 + 4xy - 2y^2)$$

$$96) \ 6u^2(5u^2 - 5uv + 6v^2)$$

$$97) \ 4v^3(5u^2 - 4uv - 4v^2)$$

$$98) \ 3(x^2 - 2xy - 8y^2)$$

$$99) \ 3(4a^2 - 3ab + 6b^2)$$

$$100) \ 5(2x^2 - 2xy + y^2)$$

$$101) \ 3x(9x^2 - 7xy + 4y^2)$$

$$102) \ 5a(4a^2 + 6ab + 7b^2)$$

$$103) \ 12m(11m^2 + 9mn - 4n^2)$$

$$104) \ 11mn(7m^2 - 11mn + 2n^2)$$

$$105) \ 3y(11x^2 - 7xy + 3y^2)$$

$$106) \ 10(7x^2 + 2xy - 7y^2)$$

$$107) \ 7y(9x^2 - 7xy - 5y^2)$$

$$108) \ 10xy(2x^2 - 9xy - 12y^2)$$

$$109) \ 10(8u^2 - 9uv + 4v^2)$$

$$110) \ 8x(x^2 + 12xy - 11y^2)$$

$$111) \ 8y^3(x^2 + 5xy + 5y^2)$$

$$112) \ 5u^2v^2(5u^2 - 8uv - 11v^2)$$

$$113) \ 7x^2(8x^2 - 3xy + 10y^2)$$

$$114) \ 5a(10a^2 - ab - 5b^2)$$

$$115) \ 5(12a^2 - ab - 9b^2)$$

$$116) \ 2(5x^2 + 3xy + 12y^2)$$

$$117) \ 12n(5m^2 - mn + 11n^2)$$

$$118) \ 2(7x^2 + 12xy - 7y^2)$$

$$119) \ 2x^3y(6x^2 + 6xy + 6y^2)$$

$$120) \ 12m^3(7m^2 - 6mn + 8n^2)$$

$$121) \ 10(7x^2 - 8xy - 6y^2)$$

$$122) \ 12(4x^2 - 6xy + 6y^2)$$

$$123) \ 9xy(2x^2 - 7xy + 11y^2)$$

$$124) \ 7xy(8x^2 - 10xy + 5y^2)$$

$$125) \ 9u(10u^2 - 7uv - 12v^2)$$

$$126) \ 7y(11x^2 + 6xy + 11y^2)$$

$$127) \ 6y(4x^2 + 6xy + 6y^2)$$

$$128) \ 4(a^2 - 12ab - 7b^2)$$

$$129) \ 4v^2(11u^2 + 9uv - 4v^2)$$

$$130) \ 4(7x^2 + 2xy - 5y^2)$$

$$131) \ 12ab^4(10a^2 + 6ab + b^2)$$

$$132) \ 11(3m^2 - 5mn - 12n^2)$$

$$133) \ 9(7x^2 - 12xy - 3y^2)$$

$$134) \ 9x^2(2x^2 + 11xy + 5y^2)$$

$$135) \ 9x^3(12x^2 + 11xy - 7y^2)$$

$$136) \ 11m^3(m^2 - 8mn - 9n^2)$$

$$137) \ 8(x^2 + 11xy + 12y^2)$$

$$138) \ 6(4x^2 + 9xy + 4y^2)$$

$$139) \ 6x^2y(x^2 + 8xy - 4y^2)$$

$$140) \ 3(5u^2 - 6uv - 3v^2)$$

$$141) \ 6(7x^2 + 12xy - y^2)$$

$$142) \ 3u^2v(11u^2 + uv - 2v^2)$$

$$143) \ 11x(4x^2 - 10xy - 12y^2)$$

$$144) \ 3(6a^2 + 3ab - 6b^2)$$

$$145) \ 7(x^2 + 6xy + 4y^2)$$

$$146) \ 11a(a^2 - 6ab + b^2)$$

$$147) \ 11(7m^2 + 10mn - 6n^2)$$

$$148) \ 8y(4x^2 + 6xy - 5y^2)$$

$$149) \ 9y(8x^2 - 2xy + y^2)$$

$$150) \ 10n(4m^2 - 6mn - 8n^2)$$

$$151) \ 8y^5(8x^2 - 2xy + 7y^2)$$

$$152) \ 5xy(7x^2 - 12xy + 2y^2)$$

$$153) \ 8xy(12x^2 + 10xy - 11y^2)$$

$$154) \ 5(12x^2 + 2xy + 8y^2)$$

$$155) \ 2(4u^2 + 4uv - 12v^2)$$

$$156) \ 5x^3(9x^2 + 12xy + 4y^2)$$

$$157) \ 2u^2(8u^2 - 6uv - v^2)$$

$$158) \ 11xy^2(12x^2 + 8xy - 12y^2)$$

$$159) \ 2b(3a^2 - 12ab - 10b^2)$$

$$160) \ 12(3x^2 - 5xy - 12y^2)$$

$$161) \ 10(9a^2 - 4ab - 5b^2)$$

$$162) \ 12x(10x^2 + 7xy + 8y^2)$$

$$163) \ 10mn(7m^2 + 6mn - 10n^2)$$

$$164) \ 7y^6(8x^2 + 5xy - 10y^2)$$

$$165) \ 9n(12m^2 - 6mn + n^2)$$

$$166) \ 7y(10x^2 - 8xy - 12y^2)$$

$$167) \ 4xy(2x^2 - 10xy + 11y^2)$$

$$168) \ 7xy(8x^2 + 12xy - 6y^2)$$

$$169) \ 2(8u^2 + 7uv + 8v^2)$$

$$170) \ 4y(9x^2 - 6xy + 5y^2)$$

$$171) \ 11u^2(6u^2 + 4uv - 11v^2)$$

$$172) \ 12x^2(x^2 + xy - 9y^2)$$

$$173) \ 7ab(2a^2 + 9ab - 7b^2)$$

$$174) \ 9(12a^2 - 12ab - 6b^2)$$

$$175) \ 12(3x^2 + 3xy + y^2)$$

$$176) \ 11(6x^2 - 12xy + y^2)$$

$$177) \ 9m(6m^2 - 12mn + 8n^2)$$

$$178) \ 6x^3y(4x^2 - 5xy + 7y^2)$$

$$179) \ 9m^4n(10m^2 + 9mn + 9n^2)$$

$$180) \ 6y^3(7x^2 + 11xy - y^2)$$

$$181) \ 3(5x^2 - 3xy - 5y^2)$$

$$182) \ 6x(9x^2 + 8xy - 4y^2)$$

$$183) \ 3xy^4(9x^2 - 8xy + 11y^2)$$

$$184) \ 9(3u^2 + 7uv - 8v^2)$$

$$185) \ 3y(4x^2 - 5xy - 11y^2)$$

$$186) \ 6uv(6u^2 + 2uv - 3v^2)$$

$$187) \ 11y^2(10x^2 + 10xy - 5y^2)$$

$$188) \ 2a(2a^2 + ab + 7b^2)$$

$$189) \ 11x(7x^2 - 5xy - 2y^2)$$

$$190) \ 8a(7a^2 + 7ab - 4b^2)$$

$$191) \ 10(11x^2 - 4xy - 5y^2)$$

$$192) \ 8(3m^2 + 5mn - 11n^2)$$

$$193) \ 5x^2(8x^2 - 11xy + 11y^2)$$

$$194) \ 3m^2(m^2 + 12mn - 3n^2)$$

$$195) \ 5y^2(6x^2 + 10xy - 9y^2)$$

$$196) \ 2y^6(2x^2 + 8xy + 9y^2)$$

$$197) \ 8(4x^2 + xy + 5y^2)$$

$$198) \ 2(8x^2 - 10xy - 11y^2)$$

$$199) \ 4v^2(6u^2 + uv + 8v^2)$$

$$200) \ 10x^2y(3x^2 - 12xy + 10y^2)$$

$$201) \ 8u^2(20u^2 - 7uv - 5v^2)$$

$$202) \ 5y(7x^2 + 4xy + 18y^2)$$

$$203) \ 11x(6x^2 - 13xy - 15y^2)$$

$$204) \ 4a^2(8a^2 + 4ab - 10b^2)$$

$$205) \ 7a(6a^2 - 16ab + 10b^2)$$

$$206) \ 4(12x^2 + 12xy - 20y^2)$$

$$207) \ 9y^2(x^2 + 2xy + 2y^2)$$

$$208) \ 6n(18m^2 + 11mn - 14n^2)$$

$$209) \ 13(8m^2 + 3mn + 18n^2)$$

$$210) \ 15x^2(10x^2 + 19xy + 11y^2)$$

$$211) \ 8xy^2(5x^2 + 20xy + 16y^2)$$

$$212) \ 17(13x^2 + 20xy - 12y^2)$$

$$213) \ 12x^3(13x^2 + 14xy - 8y^2)$$

$$214) \ 14(17u^2 + 11uv - 16v^2)$$

$$215) \ 20u^2v^3(2u^2 - 10uv - 19v^2)$$

$$216) \ 16y(8x^2 + 14xy - 12y^2)$$

$$217) \ 10x^2(3x^2 + 20xy + 18y^2)$$

$$218) \ 12b(8a^2 + 11ab + 12b^2)$$

$$219) \ 18(a^2 - 13ab + 4b^2)$$

$$220) \ 19y^2(10x^2 - 5xy + 7y^2)$$

$$221) \ 15x(7x^2 + 13xy + 4y^2)$$

$$222) \ 3m(7m^2 - 3mn - 3n^2)$$

$$223) \ 17n^2(14m^2 + 6mn - 7n^2)$$

$$224) \ 20y^2(18x^2 - 19xy + 14y^2)$$

$$225) \ 5y^2(19x^2 - 11xy - 18y^2)$$

$$226) \ 2x^2(2x^2 + 14xy + 2y^2)$$

$$227) \ 7(14x^2 - 14xy + 7y^2)$$

$$228) \ 19xy(7x^2 - 2xy - 9y^2)$$

$$229) \ 4(9u^2 + 18uv + 4v^2)$$

$$230) \ 13(20x^2 - 10xy - 20y^2)$$

$$231) \ 10v(17u^2 - 3uv + 15v^2)$$

$$232) \ 6x^4(2x^2 + 9xy + 2y^2)$$

$$233) \ 2a^2(13a^2 - 9ab + 19b^2)$$

$$234) \ 8(15a^2 - 6ab + 14b^2)$$

$$235) \ 5(18x^2 - 15xy + 11y^2)$$

$$236) \ 12(19x^2 + 3xy + 18y^2)$$

$$237) \ 14m(8m^2 + 7mn + 8n^2)$$

$$238) \ 11x^2y(16x^2 + 16xy - 12y^2)$$

$$239) \ 16y^2(15x^2 - 15xy + y^2)$$

$$240) \ 7n^3(8m^2 + 5mn - n^2)$$

$$241) \ 13y^2(19x^2 - 16xy + 14y^2)$$

$$242) \ 9(3x^2 + 2xy - 10y^2)$$

$$243) \ 19x(19x^2 - 14xy - 8y^2)$$

$$244) \ 15uvw(11u^2 - 15uv + 3v^2)$$

$$245) \ 11y(18x^2 + 11xy + 10y^2)$$

$$246) \ 9u(12u^2 - 6uv + 12v^2)$$

$$247) \ 17y(18x^2 + 4xy + 18y^2)$$

$$248) \ 14a^5(19a^2 + 13ab - 3b^2)$$

$$249) \ 19(15a^2 + 10ab - 7b^2)$$

$$250) \ 16(11x^2 - 8xy - 10y^2)$$

$$251) \ 4(15m^2 - 17mn - 14n^2)$$

$$252) \ 2x(17x^2 - 3xy - 14y^2)$$

$$253) \ 13x^2(5x^2 - 13xy + 3y^2)$$

$$254) \ 6x^2y(17x^2 - 4xy + 16y^2)$$

$$255) \ 3y^2(7x^2 + 4xy + 17y^2)$$

$$256) \ 18m^2(6m^2 - 14mn + 8n^2)$$

$$257) \ 20(16x^2 + 18xy - 12y^2)$$

$$258) \ 17(20x^2 + 9xy - 3y^2)$$

$$259) \ 17x^2y(4x^2 - 15xy + y^2)$$

$$260) \ 5u(20u^2 - 7uv - 4v^2)$$

$$261) \ 19v(19u^2 - 14uv + 4v^2)$$

$$262) \ 4b(19a^2 + 20ab + 13b^2)$$

$$263) \ 16y(x^2 - 3xy + 13y^2)$$

$$264) \ 7y(19x^2 - 17xy - 12y^2)$$

$$265) \ 9ab^2(18a^2 + ab + 3b^2)$$

$$266) \ 6x(18x^2 + 14xy - 19y^2)$$

$$267) \ 2(7m^2 - 11mn - 3n^2)$$

$$268) \ 12y^3(2x^2 - 10xy + 18y^2)$$

$$269) \ 8n^2(15m^2 + 6mn + 20n^2)$$

$$270) \ 5x^2(19x^2 - 10xy - y^2)$$

$$271) \ 10(17x^2 - 16xy + 20y^2)$$

$$272) \ 14x^2y(19x^2 - 12xy - 8y^2)$$

$$273) \ 7(13x^2 + 16xy + 17y^2)$$

$$274) \ 13x(7x^2 + 9xy - 9y^2)$$

$$275) \ 9u^2(17u^2 + 15uv - 14v^2)$$

$$276) \ 16(16u^2 + 7uv + 13v^2)$$

$$277) \ 18y(20x^2 - 7xy + 8y^2)$$

$$278) \ 15b(20a^2 - 10ab - 8b^2)$$

$$279) \ 11(5x^2 - 8xy - 14y^2)$$

$$280) \ 3b(14a^2 + 4ab + 18b^2)$$

$$281) \ 17xy^2(7x^2 - 7xy + 20y^2)$$

$$282) \ 13m(18m^2 + 17mn + 9n^2)$$

$$283) \ 2y(18x^2 + 13xy - 8y^2)$$

$$284) \ 19n^3(3m^2 - 18mn - 6n^2)$$

$$285) \ 16y^2(15x^2 + xy + 11y^2)$$

$$286) \ 4x^2(19x^2 - 15xy - 9y^2)$$

$$287) \ 15(9x^2 - 10xy + 9y^2)$$

$$288) \ 18(13x^2 - 18xy - 14y^2)$$

$$289) \ 6(9u^2 + 14uv - 17v^2)$$

$$290) \ 3(12x^2 + 4xy + 20y^2)$$

$$291) \ 20v(8u^2 + 17uv - 6v^2)$$

$$292) \ 8x^3y^2(6x^2 - 8xy + 8y^2)$$

$$293) \ 5a^5b(12a^2 + 11ab - 5b^2)$$

$$294) \ 19(20x^2 + 6xy - 14y^2)$$

$$295) \ 11(a^2 - 10ab + 2b^2)$$

$$296) \ 7xy(14x^2 - 5xy - 4y^2)$$

$$297) \ 4mn^3(4m^2 - 4mn - 9n^2)$$

$$298) \ 13y^4(2x^2 + 7xy + 7y^2)$$

$$299) \ 9n(19m^2 + 20mn - 13n^2)$$

$$300) \ 6y^2(3x^2 - 20xy + 14y^2)$$

$$301) \ 27y^2(46x^2 + 13xy - 8y^2)$$

$$302) \ 15(47x^2 - 40xy - 45y^2)$$

$$303) \ 14u(48u^2 + 19uv + 19v^2)$$

$$304) \ 2x(49x^2 + 37xy + 17y^2)$$

$$305) \ 2(8x^2 + 24xy + 20y^2)$$

$$306) \ 40v(48u^2 - 19uv + 22v^2)$$

$$307) \ 40a^4(24a^2 + 12ab - 49b^2)$$

$$308) \ 27(32x^2 + 32xy - 17y^2)$$

$$309) \ 2x^2y^2(11x^2 - xy - 2y^2)$$

$$310) \ 40(45a^2 + 20ab - 36b^2)$$

$$311) \ 15(44m^2 - 5mn + 28n^2)$$

$$312) \ 27(31x^2 + 8xy + 47y^2)$$

$$313) \ 27y^2(38x^2 - 23xy + 8y^2)$$

$$314) \ 14m^4(24m^2 - 25mn - 27n^2)$$

$$315) \ 14y(19x^2 - 46xy - 18y^2)$$

$$316) \ 2(30u^2 + 35uv + 36v^2)$$

$$317) \ 2x^2(41x^2 - 19xy - 40y^2)$$

$$318) \ 27u(43u^2 - 45uv - 12v^2)$$

$$319) \ 40x(44x^2 - 26xy - 14y^2)$$

$$320) \ 40(42x^2 - 46xy + 38y^2)$$

$$321) \ 27v^2(23u^2 - 9uv + 18v^2)$$

$$322) \ 27b(42a^2 - 18ab + 38b^2)$$

$$323) \ 14(40x^2 + 6xy - 36y^2)$$

$$324) \ 15y(43x^2 + xy + 37y^2)$$

$$325) \ 2ab(29a^2 + 42ab + 24b^2)$$

$$326) \ 2(m^2 + 26mn + 9n^2)$$

$$327) \ 40y(15x^2 - 10xy + 47y^2)$$

$$328) \ 14xy^3(25x^2 + 16xy + 16y^2)$$

$$329) \ 2m^3(41m^2 + 29mn - 46n^2)$$

$$330) \ 27y(14x^2 - 8xy - 49y^2)$$

$$331) \ 40(38u^2 - 35uv - 27v^2)$$

$$332) \ 40x^5(29x^2 + 30xy - 10y^2)$$

$$333) \ 27(50x^2 - 47xy - 45y^2)$$

$$334) \ 15(37u^2 - 3uv + 37v^2)$$

$$335) \ 27(49x^2 - 15xy + 19y^2)$$

$$336) \ 14u^2v(27u^2 - 9uv + 32v^2)$$

$$337) \ 2x^4(39x^2 + 45xy + 5y^2)$$

$$338) \ 2y(37x^2 + xy + 9y^2)$$

$$339) \ 40a(37a^2 - 17ab + 11b^2)$$

$$340) \ 14b^2(22a^2 + 7ab + 44b^2)$$

$$341) \ 15y(27x^2 + xy + 39y^2)$$

$$342) \ 40(34m^2 + 47mn + 14n^2)$$

$$343) \ 27y(10x^2 + 28xy + 16y^2)$$

$$344) \ 40n(10m^2 + 10mn - 39n^2)$$

$$345) \ 27y^2(6x^2 - 38xy + 7y^2)$$

$$346) \ 14y(9x^2 - 28xy - 36y^2)$$

$$347) \ 27u(9u^2 - 46uv - 34v^2)$$

$$348) \ 14x(9x^2 + 36xy - 32y^2)$$

$$349) \ 2(19u^2 - 29uv + 18v^2)$$

$$350) \ 40x^2y(34x^2 + 13xy - 33y^2)$$

$$351) \ 27u(40u^2 - 27uv - 36v^2)$$

$$352) \ 14(6x^2 - 41xy - 45y^2)$$

$$353) \ 29a^3(40a^2 - 21ab - 39b^2)$$

$$354) \ 40y^2(44x^2 - 22xy - 35y^2)$$

$$355) \ 27(43a^2 - 45ab - 36b^2)$$

$$356) \ 39(29x^2 + 43xy + 46y^2)$$

$$357) \ 27(42m^2 + 31mn + 27n^2)$$

$$358) \ 27m^2n^2(41m^2 - 17mn - 45n^2)$$

$$359) \ 14y(4x^2 + 29xy + 32y^2)$$

$$360) \ 14x^3y^3(49x^2 + 12xy + 6y^2)$$

$$361) \ 14u(4u^2 - 8uv + 36v^2)$$

$$362) \ 2y(4x^2 + 10xy + 34y^2)$$

$$363) \ 15(4x^2 - 27xy + 37y^2)$$

$$364) \ 17y(34x^2 + 41xy + 33y^2)$$

$$365) \ 40(27u^2 + 2uv - 45v^2)$$

$$366) \ 40b^3(32a^2 - 19ab + 34b^2)$$

$$367) \ 27y(2x^2 - 13xy - 14y^2)$$

$$368) \ 39a^2(38a^2 - 11ab + 34b^2)$$

$$369) \ 27x^4(42x^2 + 15xy + 19y^2)$$

$$370) \ 14(50a^2 - 14ab + 45b^2)$$

$$371) \ 27(12x^2 - 27xy - 17y^2)$$

$$372) \ 14(49m^2 - 39mn - 36n^2)$$

$$373) \ 27x^3(42x^2 + 10xy + 33y^2)$$

$$374) \ 14m^3(48m^2 - 8mn + 23n^2)$$

$$375) \ 29x(23x^2 + xy - 4y^2)$$

$$376) \ 40y(50x^2 - 9xy + 3y^2)$$

$$377) \ 31(50u^2 - 28uv + 5v^2)$$

$$378) \ 39(22x^2 + 45xy - 46y^2)$$

$$379) \ 27u(49u^2 + 36uv - 49v^2)$$

$$380) \ 39x(49x^2 + 18xy - 47y^2)$$

$$381) \ 27b^2(5a^2 - 46ab - 46b^2)$$

$$382) \ 14y^2(7x^2 - 44xy + 2y^2)$$

$$383) \ 12ab^2(43a^2 + 25ab - 32b^2)$$

$$384) \ 14x^2(10x^2 - 40xy - 45y^2)$$

$$385) \ 15b^2(4a^2 - 41ab - 50b^2)$$

$$386) \ 17n(14m^2 - 35mn + 12n^2)$$

$$387) \ 39y(21x^2 + 27xy - 33y^2)$$

$$388) \ 40(20x^2 + 4xy - 36y^2)$$

$$389) \ 27m^2n^2(44m^2 + 46mn - 10n^2)$$

$$390) \ 39x^3y(31x^2 - 42xy + 44y^2)$$

$$391) \ 27y(20x^2 - 28xy + 16y^2)$$

$$392) \ 14(43u^2 + 32uv + 10v^2)$$

$$393) \ 27(5x^2 - 25xy - 8y^2)$$

$$394) \ 14(42u^2 - 37uv - 27v^2)$$

$$395) \ 26(44x^2 - 45xy + 23y^2)$$

$$396) \ 14a^2b^2(32a^2 - 21ab - 36b^2)$$

$$397) \ 29x^2y(44x^2 - 8xy + 18y^2)$$

$$398) \ 40b^2(4a^2 + 28ab + 24b^2)$$

$$399) \ 39a(43a^2 - 37ab - 26b^2)$$

$$400) \ 31x^3y(11x^2 + 26xy - 8y^2)$$

$$401) \ 10x(85x^2 + 40xy + 73y^2)$$

$$402) \ 8(99m^2 - 99mn - 63n^2)$$

$$403) \ 93n(48m^2 - 74mn - 66n^2)$$

$$404) \ 51(10x^2 + 9xy + 29y^2)$$

$$405) \ 91y(36x^2 + 23xy + 22y^2)$$

$$406) \ 33x^4(85x^2 - 55xy + 7y^2)$$

$$407) \ 74(86x^2 - 56xy - 87y^2)$$

$$408) \ 75u(12u^2 + 17uv - 4v^2)$$

$$409) \ 15(99u^2 + 47uv + 11v^2)$$

$$410) \ 57xy(86x^2 + 59xy + 20y^2)$$

$$411) \ 56a^4(95a^2 - 37ab + 72b^2)$$

$$412) \ 98x^2y(89x^2 + 74xy + 45y^2)$$

$$413) \ 40b(96a^2 - 6ab - 75b^2)$$

$$414) \ 80(86a^2 + 90ab - 12b^2)$$

$$415) \ 38y^2(69x^2 + 12xy - 73y^2)$$

$$416) \ 22(55x^2 - 3xy + 85y^2)$$

$$417) \ 20m(47m^2 - 18mn + 75n^2)$$

$$418) \ 2y(67x^2 + 73xy - 64y^2)$$

$$419) \ 4n(79m^2 - 25mn + 49n^2)$$

$$420) \ 63xy^2(99x^2 + 36xy - 55y^2)$$

$$421) \ 45x^2y(3x^2 - 87xy - 2y^2)$$

$$422) \ 86x(30x^2 - 37xy + 3y^2)$$

$$423) \ 27(67u^2 + 50uv + 56v^2)$$

$$424) \ 87u(43u^2 + 67uv - 90v^2)$$

$$425) \ 70(80x^2 - 43xy - 48y^2)$$

$$426) \ 52a^2b^3(100a^2 - 31ab - 49b^2)$$

$$427) \ 9y^2(87x^2 - 48xy + 76y^2)$$

$$428) \ 68(49a^2 + 60ab + 50b^2)$$

$$429) \ 50x^2(50x^2 - 74xy - 71y^2)$$

$$430) \ 34(67x^2 - 5xy - 66y^2)$$

$$431) \ 32m(78m^2 + 31mn - 12n^2)$$

$$432) \ 93(55m^2 + 88mn + 37n^2)$$

$$433) \ 75x(66x^2 - 72xy + 76y^2)$$

$$434) \ 16m^2n^4(50m^2 + 14mn - 27n^2)$$

$$435) \ 57y(86x^2 + 14xy - 58y^2)$$

$$436) \ 15y(98x^2 - 83xy + 56y^2)$$

$$437) \ 99(55u^2 + 34uv - 89v^2)$$

$$438) \ 98(67x^2 - 60xy + 8y^2)$$

$$439) \ 39uv(22u^2 + 5uv - v^2)$$

$$440) \ 82x(37x^2 + 2xy + 92y^2)$$

$$441) \ 80(61a^2 + 62ab + 99b^2)$$

$$442) \ 21y^6(79x^2 - 35xy - 27y^2)$$

$$443) \ 64a^3b(36a^2 + 33ab - 38b^2)$$

$$444) \ 5x^4(85x^2 - 85xy + 15y^2)$$

$$445) \ 4m(32m^2 + 82mn - 67n^2)$$

$$446) \ 88(49m^2 - 100mn + 76n^2)$$

$$447) \ 87(17x^2 + 8xy - 28y^2)$$

$$448) \ 46(36x^2 - 7xy - 21y^2)$$

$$449) \ 28(30m^2 - 86mn + 70n^2)$$

$$450) \ 69x^4y(69x^2 - 16xy - 41y^2)$$

$$451) \ 71x^2(77x^2 - 30xy + 99y^2)$$

$$452) \ 10(23u^2 + 32uv - 40v^2)$$

$$453) \ 53(36x^2 - 62xy + 58y^2)$$

$$454) \ 51uv^3(48u^2 - 49uv - 57v^2)$$

$$455) \ 94xy^2(93x^2 + 31xy + 34y^2)$$

$$456) \ 35a(55a^2 - 57ab + 99b^2)$$

$$457) \ 34y(43x^2 + 41xy - 14y^2)$$

$$458) \ 76b^3(41a^2 - 87ab + 86b^2)$$

$$459) \ 17y^2(68x^2 - 40xy - 62y^2)$$

$$460) \ 16(36m^2 + 84mn - 69n^2)$$

$$461) \ 58x(51x^2 + 28xy - 65y^2)$$

$$462) \ 7(39m^2 - 75mn + 22n^2)$$

$$463) \ 99(30x^2 + 6xy + 22y^2)$$

$$464) \ 40(99m^2 - 88mn - 81n^2)$$

$$465) \ 83x^2y(53x^2 + 100xy + 69y^2)$$

$$466) \ 81x^2(97x^2 - 29xy - 76y^2)$$

$$467) \ 23u^3v(69u^2 + 34uv + 30v^2)$$

$$468) \ 65(5x^2 - 64xy - 98y^2)$$

$$469) \ 63(17u^2 + 44uv - v^2)$$

$$470) \ 5(87x^2 - 49xy + 96y^2)$$

$$471) \ 47(99a^2 + 58ab - 7b^2)$$

$$472) \ 46xy(86x^2 + 100xy + 87y^2)$$

$$473) \ 88a^2(68a^2 - 13ab - 85b^2)$$

$$474) \ 29y(50x^2 + 84xy + 75y^2)$$

$$475) \ 28(5m^2 + 87mn - 19n^2)$$

$$476) \ 70xy(69x^2 + 49xy - 6y^2)$$

$$477) \ 12m(70m^2 - 30mn - 64n^2)$$

$$478) \ 10x(57x^2 + 67xy + 24y^2)$$

$$479) \ 52(11m^2 - 90mn - 37n^2)$$

$$480) \ 95y(33x^2 + 61xy + 3y^2)$$

$$481) \ 93y(21x^2 - 43xy + 91y^2)$$

$$482) \ 35u^2(59u^2 - 22uv - 45v^2)$$

$$483) \ 77xy(40x^2 + 65xy - 15y^2)$$

$$484) \ 75(87u^2 + 42uv + 49v^2)$$

$$485) \ 59(68a^2 + 56ab + 43b^2)$$

$$486) \ 17(99x^2 - 51xy - 55y^2)$$

$$487) \ 58xy^2(78x^2 + 93xy - 97y^2)$$

$$488) \ 100a^3(80a^2 - 83ab - 14b^2)$$

$$489) \ 42x^2(87x^2 - 11xy - 53y^2)$$

$$490) \ 40(74m^2 + 85mn + 25n^2)$$

$$491) \ 82(87x^2 - 8xy - 78y^2)$$

$$492) \ 24mn(31m^2 + 56mn + 25n^2)$$

$$493) \ 22x(88x^2 - 84xy - 57y^2)$$

$$494) \ 65(81x^2 - 92xy + 13y^2)$$

$$495) \ 6(93x^2 + 16xy - 90y^2)$$

$$496) \ 4y(52x^2 + 7xy + 5y^2)$$

$$497) \ 47v(39u^2 + 100uv + 93v^2)$$

$$498) \ 89x(27x^2 - 4xy - 21y^2)$$

$$499) \ 88uv(59u^2 + 67uv + 17v^2)$$

$$500) \ 29xy^3(15x^2 - 8xy - 22y^2)$$

$$501) \ 71(81a^2 + 54ab + 87b^2)$$

$$502) \ 70(49x^2 - 39xy - 16y^2)$$

$$503) \ 54x^3(95x^2 - 52xy - 79y^2)$$

$$504) \ 11a^4(16a^2 + 39ab - 64b^2)$$

$$505) \ 52(43m^2 + 83mn + 75n^2)$$

$$506) \ 94(55x^2 - 10xy - 28y^2)$$

$$507) \ 36(68m^2 + 98mn + 69n^2)$$

$$508) \ 78(37x^2 + 4xy - 39y^2)$$

$$509) \ 77x(6x^2 + 58xy - 56y^2)$$

$$510) \ 18x(95x^2 - 46xy + 32y^2)$$

$$511) \ 59v^2(77u^2 + 11uv - 36v^2)$$

$$512) \ 40(58x^2 + 46xy + 99y^2)$$

$$513) \ 60x^2(96x^2 - 81xy - 60y^2)$$

$$514) \ 43u(46u^2 - 58uv - 14v^2)$$

$$515) \ 84(49a^2 + 57ab - 64b^2)$$

$$516) \ 25(62x^2 - 36xy + 34y^2)$$

$$517) \ 41xy(22x^2 + 74xy + 48y^2)$$

$$518) \ 23(30a^2 + 67ab - 75b^2)$$

$$519) \ 66y^3(64x^2 - 45xy - 26y^2)$$

$$520) \ 7m^4(42m^2 + 57mn + 35n^2)$$

$$521) \ 6x(17x^2 + 16xy - 3y^2)$$

$$522) \ 48m(5m^2 - 87mn + 85n^2)$$

$$523) \ 89(18x^2 - 91xy - 93y^2)$$

$$524) \ 30x(69x^2 + 4xy - 49y^2)$$

$$525) \ 90(49x^2 + 2xy + 10y^2)$$

$$526) \ 71v^2(58u^2 - 75uv - 29v^2)$$

$$527) \ 73x^2y^2(100x^2 - 43xy - 49y^2)$$

$$528) \ 55(37u^2 + 41uv - 13v^2)$$

$$529) \ 12(24x^2 - 67xy + 96y^2)$$

$$530) \ 96ab(41a^2 + 75ab + 79b^2)$$

$$531) \ 37xy(22x^2 - 38xy - 97y^2)$$

$$532) \ 53(49x^2 - 53xy + 84y^2)$$

$$533) \ 35ab^2(31a^2 - 67ab - 56b^2)$$

$$534) \ 19n(60m^2 - 31mn + 29n^2)$$

$$535) \ 78y(15x^2 + 72xy - 64y^2)$$

$$536) \ 18xy^2(80x^2 + 11xy - 8y^2)$$

$$537) \ 60m(36m^2 - 37mn + 4n^2)$$

$$538) \ 100(11x^2 - 48xy - 22y^2)$$

$$539) \ 42(100x^2 + 15xy + 49y^2)$$

$$540) \ 56(23x^2 + 60xy + 91y^2)$$

$$541) \ 85(12x^2 - 79xy - 55y^2)$$

$$542) \ 83u^2(96u^2 + 40uv - 27v^2)$$

$$543) \ 67(5u^2 + 39uv + 37v^2)$$

$$544) \ 24x^3y(69x^2 - 20xy + 50y^2)$$

$$545) \ 65(18x^2 - 55xy - 67y^2)$$

$$546) \ 7(30a^2 + 53ab + 31b^2)$$

$$547) \ 49x(71x^2 - 73xy + 82y^2)$$

$$548) \ 48ab(86a^2 - 31ab - 66b^2)$$

$$549) \ 90(24x^2 - 26xy - 79y^2)$$

$$550) \ 30(5x^2 - 16xy - 90y^2)$$

$$551) \ 72(18m^2 + 91mn + 7n^2)$$

$$552) \ 31n(34m^2 + 13mn - 57n^2)$$

$$553) \ 14x(54x^2 - 96xy + 5y^2)$$

$$554) \ 12x(42x^2 + xy + 93y^2)$$

$$555) \ 54(12x^2 + 13xy + 99y^2)$$

$$556) \ 97(81x^2 - 81xy - 5y^2)$$

$$557) \ 95v^2(77u^2 - 41uv - 20v^2)$$

$$558) \ 79u(82u^2 + 87uv - 66v^2)$$

$$559) \ 77(87x^2 - 57xy - 22y^2)$$

$$560) \ 37x^2(58x^2 + 47xy + 4y^2)$$

$$561) \ 19(100a^2 + 51ab + 75b^2)$$

$$562) \ 61(69x^2 - 42xy - 28y^2)$$

$$563) \ 60(81a^2 + 66ab + 69b^2)$$

$$564) \ 15y(4x^2 - 30xy - 34y^2)$$

$$565) \ 43m^3(16m^2 - 5mn + 15n^2)$$

$$566) \ 84(87m^2 + 94mn + 57n^2)$$

$$567) \ 26(100x^2 - 4xy - 46y^2)$$

$$568) \ 42y(53x^2 - 40xy - 55y^2)$$

$$569) \ 68x(73x^2 + 51xy + 12y^2)$$

$$570) \ 8(94x^2 - 83xy + 40y^2)$$

$$571) \ 50(62u^2 + 25uv - 64v^2)$$

$$572) \ 66x(61x^2 - 52xy + 100y^2)$$

$$573) \ 49y^2(96x^2 - 39xy + 11y^2)$$

$$574) \ 91(88u^2 + 40uv - 70v^2)$$

$$575) \ 32x(100x^2 + 28xy - 65y^2)$$

$$576) \ 31ab(40a^2 + 23ab + 90b^2)$$

$$577) \ 73(81x^2 - 44xy + 22y^2)$$

$$578) \ 13(62x^2 - 30xy + 16y^2)$$

$$579) \ 15(50a^2 + 63ab - 82b^2)$$

$$580) \ 56m^2(67m^2 - 23mn - 3n^2)$$

$$581) \ 98x^2(48x^2 + 65xy + 27y^2)$$

$$582) \ 96(56m^2 + 92mn - 99n^2)$$

$$583) \ 38(69x^2 - xy - 2y^2)$$

$$584) \ 80(81x^2 - 94xy + 96y^2)$$

$$585) \ 79xy^2(37x^2 - 66xy + 81y^2)$$

$$586) \ 62(75u^2 + 23uv - 14v^2)$$

$$587) \ 20x(79x^2 + 90xy - 100y^2)$$

$$588) \ 61y^3(43x^2 + 13xy - 67y^2)$$

$$589) \ 2v^4(37u^2 + 16uv + 80v^2)$$

$$590) \ 45(69x^2 - 56xy + 78y^2)$$

$$591) \ 43a(18a^2 - 26ab - 58b^2)$$

$$592) \ 85xy^2(93x^2 - 80xy + 68y^2)$$

$$593) \ 27(62a^2 + 61ab - 37b^2)$$

$$594) \ 25(31x^2 - 32xy + 60y^2)$$

$$595) \ 68(44m^2 + 76mn - 43n^2)$$

$$596) \ 9x^2(86x^2 - 22xy + 29y^2)$$

$$597) \ 7mn(68m^2 + 66mn + 53n^2)$$

$$598) \ 92(50x^2 - 96xy - 55y^2)$$

$$599) \ 50(37x^2 - 3xy + 48y^2)$$

$$600) \ 91(62x^2 + 12xy + 42y^2)$$

Multiplying polynomials - Integers - Simplify product of monomials and trinomials

Simplify integer product with two variables:

1) $5(4x^2 + 5xy - 2y^2)$

$20x^2 + 25xy - 10y^2$

2) $7(4m^2 + 4mn - 4n^2)$

$28m^2 + 28mn - 28n^2$

3) $2(5x^2 + 4xy - 8y^2)$

$10x^2 + 8xy - 16y^2$

4) $6u^3(5u^2 - 3uv - 6v^2)$

$30u^5 - 18u^4v - 36u^3v^2$

5) $4y(4x^2 - 6xy + 6y^2)$

$16yx^2 - 24y^2x + 24y^3$

6) $3y(3x^2 + 2xy - 8y^2)$

$9yx^2 + 6y^2x - 24y^3$

7) $3(3u^2 - 2uv - 3v^2)$

$9u^2 - 6uv - 9v^2$

8) $8ab(7a^2 + 7ab - 2b^2)$

$56a^3b + 56a^2b^2 - 16ab^3$

9) $6(x^2 + 3xy - 7y^2)$

$6x^2 + 18xy - 42y^2$

10) $2xy^5(4x^2 - 8xy + 5y^2)$

$8x^3y^5 - 16x^2y^6 + 10xy^7$

11) $5(4a^2 - 7ab + 4b^2)$

$20a^2 - 35ab + 20b^2$

12) $7y(2x^2 + 6xy + 2y^2)$

$14yx^2 + 42y^2x + 14y^3$

13) $2n(2m^2 + 7mn + 3n^2)$

$4nm^2 + 14n^2m + 6n^3$

14) $4(6x^2 - 8xy - y^2)$

$24x^2 - 32xy - 4y^2$

15) $6(7m^2 - 8mn + n^2)$

$42m^2 - 48mn + 6n^2$

16) $8(2x^2 + 2xy - 7y^2)$

$16x^2 + 16xy - 56y^2$

17) $3mn^2(4m^2 - 2mn + 7n^2)$

$12m^3n^2 - 6m^2n^3 + 21mn^4$

18) $6(x^2 - xy + 5y^2)$

$6x^2 - 6xy + 30y^2$

19) $8(2x^2 + 7xy - y^2)$

$16x^2 + 56xy - 8y^2$

20) $3u^2v(6u^2 + 3uv + 8v^2)$

$18u^4v + 9u^3v^2 + 24u^2v^3$

21) $5xy(7x^2 + 3xy - y^2)$

$35x^3y + 15x^2y^2 - 5xy^3$

22) $2(5x^2 - 2xy - 5y^2)$

$10x^2 - 4xy - 10y^2$

23) $8(4u^2 - 2uv - 6v^2)$

$32u^2 - 16uv - 48v^2$

24) $4(6a^2 - 3ab - 3b^2)$

$24a^2 - 12ab - 12b^2$

$$25) \ 8(7x^2 - 3xy + 6y^2)$$

$$56x^2 - 24xy + 48y^2$$

$$26) \ 6b^2(3a^2 + 2ab - 8b^2)$$

$$18b^2a^2 + 12b^3a - 48b^4$$

$$27) \ 7m^2(7m^2 - 3mn + 4n^2)$$

$$49m^4 - 21m^3n + 28m^2n^2$$

$$28) \ 5(3x^2 - 5xy - 6y^2)$$

$$15x^2 - 25xy - 30y^2$$

$$29) \ 3x^2(8x^2 - xy - 2y^2)$$

$$24x^4 - 3x^3y - 6x^2y^2$$

$$30) \ 3(2m^2 + 4mn - 3n^2)$$

$$6m^2 + 12mn - 9n^2$$

$$31) \ 2(5x^2 + 3xy + y^2)$$

$$10x^2 + 6xy + 2y^2$$

$$32) \ 8m(2m^2 - mn - 7n^2)$$

$$16m^3 - 8m^2n - 56mn^2$$

$$33) \ 6x(8x^2 - 2xy + 4y^2)$$

$$48x^3 - 12x^2y + 24xy^2$$

$$34) \ 5(6x^2 + 3xy + 2y^2)$$

$$30x^2 + 15xy + 10y^2$$

$$35) \ 8v^2(6u^2 + 5uv + 4v^2)$$

$$48v^2u^2 + 40v^3u + 32v^4$$

$$36) \ 3xy(4x^2 + 5xy - 6y^2)$$

$$12x^3y + 15x^2y^2 - 18xy^3$$

$$37) \ 4(8u^2 - 7uv - 2v^2)$$

$$32u^2 - 28uv - 8v^2$$

$$38) \ 7xy(x^2 + 7xy + 5y^2)$$

$$7x^3y + 49x^2y^2 + 35xy^3$$

$$39) \ 6(3a^2 - 8ab + 3b^2)$$

$$18a^2 - 48ab + 18b^2$$

$$40) \ 4(2x^2 - 8xy + 2y^2)$$

$$8x^2 - 32xy + 8y^2$$

$$41) \ 2(4a^2 + ab + 4b^2)$$

$$8a^2 + 2ab + 8b^2$$

$$42) \ 8xy(4x^2 - 6xy + 5y^2)$$

$$32x^3y - 48x^2y^2 + 40xy^3$$

$$43) \ 3m^2n^3(7m^2 + 3mn + n^2)$$

$$21m^4n^3 + 9m^3n^4 + 3m^2n^5$$

$$44) \ 5(6x^2 - xy + 8y^2)$$

$$30x^2 - 5xy + 40y^2$$

$$45) \ 8(6m^2 - mn - 8n^2)$$

$$48m^2 - 8mn - 64n^2$$

$$46) \ 2(8x^2 - 2xy + 2y^2)$$

$$16x^2 - 4xy + 4y^2$$

$$47) \ 4(8m^2 - 2mn + 3n^2)$$

$$32m^2 - 8mn + 12n^2$$

$$48) \ 8(6x^2 + 6xy - 3y^2)$$

$$48x^2 + 48xy - 24y^2$$

$$49) \ 7x(3x^2 + 5xy + 6y^2)$$

$$21x^3 + 35x^2y + 42xy^2$$

$$50) \ 4v^3(7u^2 + 6uv + 2v^2)$$

$$28v^3u^2 + 24v^4u + 8v^5$$

$$51) \ 8(6u^2 - 7uv + 4v^2)$$

$$48u^2 - 56uv + 32v^2$$

$$52) \ 3x(6x^2 + xy + 2y^2)$$

$$18x^3 + 3x^2y + 6xy^2$$

$$53) 6y^2(4x^2 + xy + 8y^2)$$
$$24y^2x^2 + 6y^3x + 48y^4$$

$$54) 5ab(4a^2 + 7ab + 6b^2)$$
$$20a^3b + 35a^2b^2 + 30ab^3$$

$$55) 6(5x^2 - 2xy + 3y^2)$$
$$30x^2 - 12xy + 18y^2$$

$$56) 2(7a^2 + 4ab + 7b^2)$$
$$14a^2 + 8ab + 14b^2$$

$$57) 5(8x^2 + 3xy - 8y^2)$$
$$40x^2 + 15xy - 40y^2$$

$$58) 8n^2(8m^2 - 6mn + 7n^2)$$
$$64n^2m^2 - 48n^3m + 56n^4$$

$$59) 4m(2m^2 - 4mn + 4n^2)$$
$$8m^3 - 16m^2n + 16mn^2$$

$$60) 7(3x^2 - 7xy - 3y^2)$$
$$21x^2 - 49xy - 21y^2$$

$$61) 6x(7x^2 + 7xy + 2y^2)$$
$$42x^3 + 42x^2y + 12xy^2$$

$$62) 4y^3(6x^2 + 6xy - 2y^2)$$
$$24y^3x^2 + 24y^4x - 8y^5$$

$$63) 3(4x^2 - 7xy - 6y^2)$$
$$12x^2 - 21xy - 18y^2$$

$$64) 6x(4x^2 + 2xy + 8y^2)$$
$$24x^3 + 12x^2y + 48xy^2$$

$$65) 2y^3(4x^2 + 7xy + 5y^2)$$
$$8y^3x^2 + 14y^4x + 10y^5$$

$$66) 4(6u^2 + 3uv + 5v^2)$$
$$24u^2 + 12uv + 20v^2$$

$$67) 6(8u^2 - 8uv - 3v^2)$$
$$48u^2 - 48uv - 18v^2$$

$$68) 8(7x^2 - xy + 4y^2)$$
$$56x^2 - 8xy + 32y^2$$

$$69) 2(a^2 + ab + 3b^2)$$
$$2a^2 + 2ab + 6b^2$$

$$70) 4x(3x^2 + 2xy - 3y^2)$$
$$12x^3 + 8x^2y - 12xy^2$$

$$71) 7(3a^2 - ab + 3b^2)$$
$$21a^2 - 7ab + 21b^2$$

$$72) 2(8x^2 + 4xy + 8y^2)$$
$$16x^2 + 8xy + 16y^2$$

$$73) 3n(2m^2 + 6mn + 4n^2)$$
$$6nm^2 + 18n^2m + 12n^3$$

$$74) 6y^2(2x^2 + xy + 8y^2)$$
$$12y^2x^2 + 6y^3x + 48y^4$$

$$75) 6mn(5m^2 + 8mn - 4n^2)$$
$$30m^3n + 48m^2n^2 - 24mn^3$$

$$76) 2x(x^2 - 7xy - 5y^2)$$
$$2x^3 - 14x^2y - 10xy^2$$

$$77) 6(8x^2 + 5xy + 3y^2)$$
$$48x^2 + 30xy + 18y^2$$

$$78) 8(8x^2 + 4xy - 3y^2)$$
$$64x^2 + 32xy - 24y^2$$

$$79) 2(x^2 + 5xy + 6y^2)$$
$$2x^2 + 10xy + 12y^2$$

$$80) 5uv(3u^2 + 8uv - 4v^2)$$
$$15u^3v + 40u^2v^2 - 20uv^3$$

$$81) 7x^2(2x^2 + 4xy + 4y^2)$$
$$14x^4 + 28x^3y + 28x^2y^2$$

$$82) 8u^3(3u^2 + 8uv - 2v^2)$$
$$24u^5 + 64u^4v - 16u^3v^2$$

$$83) 7(5a^2 + 3ab - 4b^2)$$
$$35a^2 + 21ab - 28b^2$$

$$84) 4(4x^2 + 3xy - 6y^2)$$
$$16x^2 + 12xy - 24y^2$$

$$85) 7(x^2 - 3xy + 8y^2)$$
$$7x^2 - 21xy + 56y^2$$

$$86) 3a(4a^2 - ab + 5b^2)$$
$$12a^3 - 3a^2b + 15ab^2$$

$$87) 6xy(x^2 + 2xy + 5y^2)$$
$$6x^3y + 12x^2y^2 + 30xy^3$$

$$88) 8n(m^2 + 7mn + 2n^2)$$
$$8nm^2 + 56n^2m + 16n^3$$

$$89) 3y(3x^2 - 6xy + 4y^2)$$
$$9yx^2 - 18y^2x + 12y^3$$

$$90) 5mn(7m^2 + mn + n^2)$$
$$35m^3n + 5m^2n^2 + 5mn^3$$

$$91) 7xy(5x^2 - 3xy + 5y^2)$$
$$35x^3y - 21x^2y^2 + 35xy^3$$

$$92) 2x(2x^2 - 2xy - 6y^2)$$
$$4x^3 - 4x^2y - 12xy^2$$

$$93) 4(5x^2 + 8xy + 5y^2)$$
$$20x^2 + 32xy + 20y^2$$

$$94) 7(5x^2 - xy + y^2)$$
$$35x^2 - 7xy + 7y^2$$

$$95) 3y(5x^2 + 4xy - 2y^2)$$
$$15yx^2 + 12y^2x - 6y^3$$

$$96) 6u^2(5u^2 - 5uv + 6v^2)$$
$$30u^4 - 30u^3v + 36u^2v^2$$

$$97) 4v^3(5u^2 - 4uv - 4v^2)$$
$$20v^3u^2 - 16v^4u - 16v^5$$

$$98) 3(x^2 - 2xy - 8y^2)$$
$$3x^2 - 6xy - 24y^2$$

$$99) 3(4a^2 - 3ab + 6b^2)$$
$$12a^2 - 9ab + 18b^2$$

$$100) 5(2x^2 - 2xy + y^2)$$
$$10x^2 - 10xy + 5y^2$$

$$101) 3x(9x^2 - 7xy + 4y^2)$$
$$27x^3 - 21x^2y + 12xy^2$$

$$102) 5a(4a^2 + 6ab + 7b^2)$$
$$20a^3 + 30a^2b + 35ab^2$$

$$103) 12m(11m^2 + 9mn - 4n^2)$$
$$132m^3 + 108m^2n - 48mn^2$$

$$104) 11mn(7m^2 - 11mn + 2n^2)$$
$$77m^3n - 121m^2n^2 + 22mn^3$$

$$105) 3y(11x^2 - 7xy + 3y^2)$$
$$33yx^2 - 21y^2x + 9y^3$$

$$106) 10(7x^2 + 2xy - 7y^2)$$
$$70x^2 + 20xy - 70y^2$$

$$107) 7y(9x^2 - 7xy - 5y^2)$$
$$63yx^2 - 49y^2x - 35y^3$$

$$108) 10xy(2x^2 - 9xy - 12y^2)$$
$$20x^3y - 90x^2y^2 - 120xy^3$$

$$109) \ 10(8u^2 - 9uv + 4v^2)$$

$$80u^2 - 90uv + 40v^2$$

$$111) \ 8y^3(x^2 + 5xy + 5y^2)$$

$$8y^3x^2 + 40y^4x + 40y^5$$

$$113) \ 7x^2(8x^2 - 3xy + 10y^2)$$

$$56x^4 - 21x^3y + 70x^2y^2$$

$$115) \ 5(12a^2 - ab - 9b^2)$$

$$60a^2 - 5ab - 45b^2$$

$$117) \ 12n(5m^2 - mn + 11n^2)$$

$$60nm^2 - 12n^2m + 132n^3$$

$$119) \ 2x^3y(6x^2 + 6xy + 6y^2)$$

$$12x^5y + 12x^4y^2 + 12x^3y^3$$

$$121) \ 10(7x^2 - 8xy - 6y^2)$$

$$70x^2 - 80xy - 60y^2$$

$$123) \ 9xy(2x^2 - 7xy + 11y^2)$$

$$18x^3y - 63x^2y^2 + 99xy^3$$

$$125) \ 9u(10u^2 - 7uv - 12v^2)$$

$$90u^3 - 63u^2v - 108uv^2$$

$$127) \ 6y(4x^2 + 6xy + 6y^2)$$

$$24yx^2 + 36y^2x + 36y^3$$

$$129) \ 4v^2(11u^2 + 9uv - 4v^2)$$

$$44v^2u^2 + 36v^3u - 16v^4$$

$$131) \ 12ab^4(10a^2 + 6ab + b^2)$$

$$120a^3b^4 + 72a^2b^5 + 12ab^6$$

$$133) \ 9(7x^2 - 12xy - 3y^2)$$

$$63x^2 - 108xy - 27y^2$$

$$135) \ 9x^3(12x^2 + 11xy - 7y^2)$$

$$108x^5 + 99x^4y - 63x^3y^2$$

$$110) \ 8x(x^2 + 12xy - 11y^2)$$

$$8x^3 + 96x^2y - 88xy^2$$

$$112) \ 5u^2v^2(5u^2 - 8uv - 11v^2)$$

$$25u^4v^2 - 40u^3v^3 - 55u^2v^4$$

$$114) \ 5a(10a^2 - ab - 5b^2)$$

$$50a^3 - 5a^2b - 25ab^2$$

$$116) \ 2(5x^2 + 3xy + 12y^2)$$

$$10x^2 + 6xy + 24y^2$$

$$118) \ 2(7x^2 + 12xy - 7y^2)$$

$$14x^2 + 24xy - 14y^2$$

$$120) \ 12m^3(7m^2 - 6mn + 8n^2)$$

$$84m^5 - 72m^4n + 96m^3n^2$$

$$122) \ 12(4x^2 - 6xy + 6y^2)$$

$$48x^2 - 72xy + 72y^2$$

$$124) \ 7xy(8x^2 - 10xy + 5y^2)$$

$$56x^3y - 70x^2y^2 + 35xy^3$$

$$126) \ 7y(11x^2 + 6xy + 11y^2)$$

$$77yx^2 + 42y^2x + 77y^3$$

$$128) \ 4(a^2 - 12ab - 7b^2)$$

$$4a^2 - 48ab - 28b^2$$

$$130) \ 4(7x^2 + 2xy - 5y^2)$$

$$28x^2 + 8xy - 20y^2$$

$$132) \ 11(3m^2 - 5mn - 12n^2)$$

$$33m^2 - 55mn - 132n^2$$

$$134) \ 9x^2(2x^2 + 11xy + 5y^2)$$

$$18x^4 + 99x^3y + 45x^2y^2$$

$$136) \ 11m^3(m^2 - 8mn - 9n^2)$$

$$11m^5 - 88m^4n - 99m^3n^2$$

$$137) \ 8(x^2 + 11xy + 12y^2)$$

$$8x^2 + 88xy + 96y^2$$

$$139) \ 6x^2y(x^2 + 8xy - 4y^2)$$

$$6x^4y + 48x^3y^2 - 24x^2y^3$$

$$141) \ 6(7x^2 + 12xy - y^2)$$

$$42x^2 + 72xy - 6y^2$$

$$143) \ 11x(4x^2 - 10xy - 12y^2)$$

$$44x^3 - 110x^2y - 132xy^2$$

$$145) \ 7(x^2 + 6xy + 4y^2)$$

$$7x^2 + 42xy + 28y^2$$

$$147) \ 11(7m^2 + 10mn - 6n^2)$$

$$77m^2 + 110mn - 66n^2$$

$$149) \ 9y(8x^2 - 2xy + y^2)$$

$$72yx^2 - 18y^2x + 9y^3$$

$$151) \ 8y^5(8x^2 - 2xy + 7y^2)$$

$$64y^5x^2 - 16y^6x + 56y^7$$

$$153) \ 8xy(12x^2 + 10xy - 11y^2)$$

$$96x^3y + 80x^2y^2 - 88xy^3$$

$$155) \ 2(4u^2 + 4uv - 12v^2)$$

$$8u^2 + 8uv - 24v^2$$

$$157) \ 2u^2(8u^2 - 6uv - v^2)$$

$$16u^4 - 12u^3v - 2u^2v^2$$

$$159) \ 2b(3a^2 - 12ab - 10b^2)$$

$$6ba^2 - 24b^2a - 20b^3$$

$$161) \ 10(9a^2 - 4ab - 5b^2)$$

$$90a^2 - 40ab - 50b^2$$

$$163) \ 10mn(7m^2 + 6mn - 10n^2)$$

$$70m^3n + 60m^2n^2 - 100mn^3$$

$$138) \ 6(4x^2 + 9xy + 4y^2)$$

$$24x^2 + 54xy + 24y^2$$

$$140) \ 3(5u^2 - 6uv - 3v^2)$$

$$15u^2 - 18uv - 9v^2$$

$$142) \ 3u^2v(11u^2 + uv - 2v^2)$$

$$33u^4v + 3u^3v^2 - 6u^2v^3$$

$$144) \ 3(6a^2 + 3ab - 6b^2)$$

$$18a^2 + 9ab - 18b^2$$

$$146) \ 11a(a^2 - 6ab + b^2)$$

$$11a^3 - 66a^2b + 11ab^2$$

$$148) \ 8y(4x^2 + 6xy - 5y^2)$$

$$32yx^2 + 48y^2x - 40y^3$$

$$150) \ 10n(4m^2 - 6mn - 8n^2)$$

$$40nm^2 - 60n^2m - 80n^3$$

$$152) \ 5xy(7x^2 - 12xy + 2y^2)$$

$$35x^3y - 60x^2y^2 + 10xy^3$$

$$154) \ 5(12x^2 + 2xy + 8y^2)$$

$$60x^2 + 10xy + 40y^2$$

$$156) \ 5x^3(9x^2 + 12xy + 4y^2)$$

$$45x^5 + 60x^4y + 20x^3y^2$$

$$158) \ 11xy^2(12x^2 + 8xy - 12y^2)$$

$$132x^3y^2 + 88x^2y^3 - 132xy^4$$

$$160) \ 12(3x^2 - 5xy - 12y^2)$$

$$36x^2 - 60xy - 144y^2$$

$$162) \ 12x(10x^2 + 7xy + 8y^2)$$

$$120x^3 + 84x^2y + 96xy^2$$

$$164) \ 7y^6(8x^2 + 5xy - 10y^2)$$

$$56y^6x^2 + 35y^7x - 70y^8$$

$$165) \ 9n(12m^2 - 6mn + n^2)$$

$$108nm^2 - 54n^2m + 9n^3$$

$$167) \ 4xy(2x^2 - 10xy + 11y^2)$$

$$8x^3y - 40x^2y^2 + 44xy^3$$

$$169) \ 2(8u^2 + 7uv + 8v^2)$$

$$16u^2 + 14uv + 16v^2$$

$$171) \ 11u^2(6u^2 + 4uv - 11v^2)$$

$$66u^4 + 44u^3v - 121u^2v^2$$

$$173) \ 7ab(2a^2 + 9ab - 7b^2)$$

$$14a^3b + 63a^2b^2 - 49ab^3$$

$$175) \ 12(3x^2 + 3xy + y^2)$$

$$36x^2 + 36xy + 12y^2$$

$$177) \ 9m(6m^2 - 12mn + 8n^2)$$

$$54m^3 - 108m^2n + 72mn^2$$

$$179) \ 9m^4n(10m^2 + 9mn + 9n^2)$$

$$90m^6n + 81m^5n^2 + 81m^4n^3$$

$$181) \ 3(5x^2 - 3xy - 5y^2)$$

$$15x^2 - 9xy - 15y^2$$

$$183) \ 3xy^4(9x^2 - 8xy + 11y^2)$$

$$27x^3y^4 - 24x^2y^5 + 33xy^6$$

$$185) \ 3y(4x^2 - 5xy - 11y^2)$$

$$12yx^2 - 15y^2x - 33y^3$$

$$187) \ 11y^2(10x^2 + 10xy - 5y^2)$$

$$110y^2x^2 + 110y^3x - 55y^4$$

$$189) \ 11x(7x^2 - 5xy - 2y^2)$$

$$77x^3 - 55x^2y - 22xy^2$$

$$191) \ 10(11x^2 - 4xy - 5y^2)$$

$$110x^2 - 40xy - 50y^2$$

$$166) \ 7y(10x^2 - 8xy - 12y^2)$$

$$70yx^2 - 56y^2x - 84y^3$$

$$168) \ 7xy(8x^2 + 12xy - 6y^2)$$

$$56x^3y + 84x^2y^2 - 42xy^3$$

$$170) \ 4y(9x^2 - 6xy + 5y^2)$$

$$36yx^2 - 24y^2x + 20y^3$$

$$172) \ 12x^2(x^2 + xy - 9y^2)$$

$$12x^4 + 12x^3y - 108x^2y^2$$

$$174) \ 9(12a^2 - 12ab - 6b^2)$$

$$108a^2 - 108ab - 54b^2$$

$$176) \ 11(6x^2 - 12xy + y^2)$$

$$66x^2 - 132xy + 11y^2$$

$$178) \ 6x^3y(4x^2 - 5xy + 7y^2)$$

$$24x^5y - 30x^4y^2 + 42x^3y^3$$

$$180) \ 6y^3(7x^2 + 11xy - y^2)$$

$$42y^3x^2 + 66y^4x - 6y^5$$

$$182) \ 6x(9x^2 + 8xy - 4y^2)$$

$$54x^3 + 48x^2y - 24xy^2$$

$$184) \ 9(3u^2 + 7uv - 8v^2)$$

$$27u^2 + 63uv - 72v^2$$

$$186) \ 6uv(6u^2 + 2uv - 3v^2)$$

$$36u^3v + 12u^2v^2 - 18uv^3$$

$$188) \ 2a(2a^2 + ab + 7b^2)$$

$$4a^3 + 2a^2b + 14ab^2$$

$$190) \ 8a(7a^2 + 7ab - 4b^2)$$

$$56a^3 + 56a^2b - 32ab^2$$

$$192) \ 8(3m^2 + 5mn - 11n^2)$$

$$24m^2 + 40mn - 88n^2$$

193) $5x^2(8x^2 - 11xy + 11y^2)$
 $40x^4 - 55x^3y + 55x^2y^2$

194) $3m^2(m^2 + 12mn - 3n^2)$
 $3m^4 + 36m^3n - 9m^2n^2$

195) $5y^2(6x^2 + 10xy - 9y^2)$
 $30y^2x^2 + 50y^3x - 45y^4$

196) $2y^6(2x^2 + 8xy + 9y^2)$
 $4y^6x^2 + 16y^7x + 18y^8$

197) $8(4x^2 + xy + 5y^2)$
 $32x^2 + 8xy + 40y^2$

198) $2(8x^2 - 10xy - 11y^2)$
 $16x^2 - 20xy - 22y^2$

199) $4v^2(6u^2 + uv + 8v^2)$
 $24v^2u^2 + 4v^3u + 32v^4$

200) $10x^2y(3x^2 - 12xy + 10y^2)$
 $30x^4y - 120x^3y^2 + 100x^2y^3$

201) $8u^2(20u^2 - 7uv - 5v^2)$
 $160u^4 - 56u^3v - 40u^2v^2$

202) $5y(7x^2 + 4xy + 18y^2)$
 $35yx^2 + 20y^2x + 90y^3$

203) $11x(6x^2 - 13xy - 15y^2)$
 $66x^3 - 143x^2y - 165xy^2$

204) $4a^2(8a^2 + 4ab - 10b^2)$
 $32a^4 + 16a^3b - 40a^2b^2$

205) $7a(6a^2 - 16ab + 10b^2)$
 $42a^3 - 112a^2b + 70ab^2$

206) $4(12x^2 + 12xy - 20y^2)$
 $48x^2 + 48xy - 80y^2$

207) $9y^2(x^2 + 2xy + 2y^2)$
 $9y^2x^2 + 18y^3x + 18y^4$

208) $6n(18m^2 + 11mn - 14n^2)$
 $108nm^2 + 66n^2m - 84n^3$

209) $13(8m^2 + 3mn + 18n^2)$
 $104m^2 + 39mn + 234n^2$

210) $15x^2(10x^2 + 19xy + 11y^2)$
 $150x^4 + 285x^3y + 165x^2y^2$

211) $8xy^2(5x^2 + 20xy + 16y^2)$
 $40x^3y^2 + 160x^2y^3 + 128xy^4$

212) $17(13x^2 + 20xy - 12y^2)$
 $221x^2 + 340xy - 204y^2$

213) $12x^3(13x^2 + 14xy - 8y^2)$
 $156x^5 + 168x^4y - 96x^3y^2$

214) $14(17u^2 + 11uv - 16v^2)$
 $238u^2 + 154uv - 224v^2$

215) $20u^2v^3(2u^2 - 10uv - 19v^2)$
 $40u^4v^3 - 200u^3v^4 - 380u^2v^5$

216) $16y(8x^2 + 14xy - 12y^2)$
 $128yx^2 + 224y^2x - 192y^3$

217) $10x^2(3x^2 + 20xy + 18y^2)$
 $30x^4 + 200x^3y + 180x^2y^2$

218) $12b(8a^2 + 11ab + 12b^2)$
 $96ba^2 + 132b^2a + 144b^3$

219) $18(a^2 - 13ab + 4b^2)$
 $18a^2 - 234ab + 72b^2$

220) $19y^2(10x^2 - 5xy + 7y^2)$
 $190y^2x^2 - 95y^3x + 133y^4$

$$221) \quad 15x(7x^2 + 13xy + 4y^2)$$

$$\color{red}105x^3 + 195x^2y + 60xy^2$$

$$223) \quad 17n^2(14m^2 + 6mn - 7n^2)$$

$$\color{red}238n^2m^2 + 102n^3m - 119n^4$$

$$225) \quad 5y^2(19x^2 - 11xy - 18y^2)$$

$$\color{red}95y^2x^2 - 55y^3x - 90y^4$$

$$227) \quad 7(14x^2 - 14xy + 7y^2)$$

$$\color{red}98x^2 - 98xy + 49y^2$$

$$229) \quad 4(9u^2 + 18uv + 4v^2)$$

$$\color{red}36u^2 + 72uv + 16v^2$$

$$231) \quad 10v(17u^2 - 3uv + 15v^2)$$

$$\color{red}170vu^2 - 30v^2u + 150v^3$$

$$233) \quad 2a^2(13a^2 - 9ab + 19b^2)$$

$$\color{red}26a^4 - 18a^3b + 38a^2b^2$$

$$235) \quad 5(18x^2 - 15xy + 11y^2)$$

$$\color{red}90x^2 - 75xy + 55y^2$$

$$237) \quad 14m(8m^2 + 7mn + 8n^2)$$

$$\color{red}112m^3 + 98m^2n + 112mn^2$$

$$239) \quad 16y^2(15x^2 - 15xy + y^2)$$

$$\color{red}240y^2x^2 - 240y^3x + 16y^4$$

$$241) \quad 13y^2(19x^2 - 16xy + 14y^2)$$

$$\color{red}247y^2x^2 - 208y^3x + 182y^4$$

$$243) \quad 19x(19x^2 - 14xy - 8y^2)$$

$$\color{red}361x^3 - 266x^2y - 152xy^2$$

$$245) \quad 11y(18x^2 + 11xy + 10y^2)$$

$$\color{red}198yx^2 + 121y^2x + 110y^3$$

$$247) \quad 17y(18x^2 + 4xy + 18y^2)$$

$$\color{red}306yx^2 + 68y^2x + 306y^3$$

$$222) \quad 3m(7m^2 - 3mn - 3n^2)$$

$$\color{red}21m^3 - 9m^2n - 9mn^2$$

$$224) \quad 20y^2(18x^2 - 19xy + 14y^2)$$

$$\color{red}360y^2x^2 - 380y^3x + 280y^4$$

$$226) \quad 2x^2(2x^2 + 14xy + 2y^2)$$

$$\color{red}4x^4 + 28x^3y + 4x^2y^2$$

$$228) \quad 19xy(7x^2 - 2xy - 9y^2)$$

$$\color{red}133x^3y - 38x^2y^2 - 171xy^3$$

$$230) \quad 13(20x^2 - 10xy - 20y^2)$$

$$\color{red}260x^2 - 130xy - 260y^2$$

$$232) \quad 6x^4(2x^2 + 9xy + 2y^2)$$

$$\color{red}12x^6 + 54x^5y + 12x^4y^2$$

$$234) \quad 8(15a^2 - 6ab + 14b^2)$$

$$\color{red}120a^2 - 48ab + 112b^2$$

$$236) \quad 12(19x^2 + 3xy + 18y^2)$$

$$\color{red}228x^2 + 36xy + 216y^2$$

$$238) \quad 11x^2y(16x^2 + 16xy - 12y^2)$$

$$\color{red}176x^4y + 176x^3y^2 - 132x^2y^3$$

$$240) \quad 7n^3(8m^2 + 5mn - n^2)$$

$$\color{red}56n^3m^2 + 35n^4m - 7n^5$$

$$242) \quad 9(3x^2 + 2xy - 10y^2)$$

$$\color{red}27x^2 + 18xy - 90y^2$$

$$244) \quad 15uv(11u^2 - 15uv + 3v^2)$$

$$\color{red}165u^3v - 225u^2v^2 + 45uv^3$$

$$246) \quad 9u(12u^2 - 6uv + 12v^2)$$

$$\color{red}108u^3 - 54u^2v + 108uv^2$$

$$248) \quad 14a^5(19a^2 + 13ab - 3b^2)$$

$$\color{red}266a^7 + 182a^6b - 42a^5b^2$$

$$249) \ 19(15a^2 + 10ab - 7b^2)$$

$$285a^2 + 190ab - 133b^2$$

$$251) \ 4(15m^2 - 17mn - 14n^2)$$

$$60m^2 - 68mn - 56n^2$$

$$253) \ 13x^2(5x^2 - 13xy + 3y^2)$$

$$65x^4 - 169x^3y + 39x^2y^2$$

$$255) \ 3y^2(7x^2 + 4xy + 17y^2)$$

$$21y^2x^2 + 12y^3x + 51y^4$$

$$257) \ 20(16x^2 + 18xy - 12y^2)$$

$$320x^2 + 360xy - 240y^2$$

$$259) \ 17x^2y(4x^2 - 15xy + y^2)$$

$$68x^4y - 255x^3y^2 + 17x^2y^3$$

$$261) \ 19v(19u^2 - 14uv + 4v^2)$$

$$361vu^2 - 266v^2u + 76v^3$$

$$263) \ 16y(x^2 - 3xy + 13y^2)$$

$$16yx^2 - 48y^2x + 208y^3$$

$$265) \ 9ab^2(18a^2 + ab + 3b^2)$$

$$162a^3b^2 + 9a^2b^3 + 27ab^4$$

$$267) \ 2(7m^2 - 11mn - 3n^2)$$

$$14m^2 - 22mn - 6n^2$$

$$269) \ 8n^2(15m^2 + 6mn + 20n^2)$$

$$120n^2m^2 + 48n^3m + 160n^4$$

$$271) \ 10(17x^2 - 16xy + 20y^2)$$

$$170x^2 - 160xy + 200y^2$$

$$273) \ 7(13x^2 + 16xy + 17y^2)$$

$$91x^2 + 112xy + 119y^2$$

$$275) \ 9u^2(17u^2 + 15uv - 14v^2)$$

$$153u^4 + 135u^3v - 126u^2v^2$$

$$250) \ 16(11x^2 - 8xy - 10y^2)$$

$$176x^2 - 128xy - 160y^2$$

$$252) \ 2x(17x^2 - 3xy - 14y^2)$$

$$34x^3 - 6x^2y - 28xy^2$$

$$254) \ 6x^2y(17x^2 - 4xy + 16y^2)$$

$$102x^4y - 24x^3y^2 + 96x^2y^3$$

$$256) \ 18m^2(6m^2 - 14mn + 8n^2)$$

$$108m^4 - 252m^3n + 144m^2n^2$$

$$258) \ 17(20x^2 + 9xy - 3y^2)$$

$$340x^2 + 153xy - 51y^2$$

$$260) \ 5u(20u^2 - 7uv - 4v^2)$$

$$100u^3 - 35u^2v - 20uv^2$$

$$262) \ 4b(19a^2 + 20ab + 13b^2)$$

$$76ba^2 + 80b^2a + 52b^3$$

$$264) \ 7y(19x^2 - 17xy - 12y^2)$$

$$133yx^2 - 119y^2x - 84y^3$$

$$266) \ 6x(18x^2 + 14xy - 19y^2)$$

$$108x^3 + 84x^2y - 114xy^2$$

$$268) \ 12y^3(2x^2 - 10xy + 18y^2)$$

$$24y^3x^2 - 120y^4x + 216y^5$$

$$270) \ 5x^2(19x^2 - 10xy - y^2)$$

$$95x^4 - 50x^3y - 5x^2y^2$$

$$272) \ 14x^2y(19x^2 - 12xy - 8y^2)$$

$$266x^4y - 168x^3y^2 - 112x^2y^3$$

$$274) \ 13x(7x^2 + 9xy - 9y^2)$$

$$91x^3 + 117x^2y - 117xy^2$$

$$276) \ 16(16u^2 + 7uv + 13v^2)$$

$$256u^2 + 112uv + 208v^2$$

277) $18y(20x^2 - 7xy + 8y^2)$

$360yx^2 - 126y^2x + 144y^3$

278) $15b(20a^2 - 10ab - 8b^2)$

$300ba^2 - 150b^2a - 120b^3$

279) $11(5x^2 - 8xy - 14y^2)$

$55x^2 - 88xy - 154y^2$

280) $3b(14a^2 + 4ab + 18b^2)$

$42ba^2 + 12b^2a + 54b^3$

281) $17xy^2(7x^2 - 7xy + 20y^2)$

$119x^3y^2 - 119x^2y^3 + 340xy^4$

282) $13m(18m^2 + 17mn + 9n^2)$

$234m^3 + 221m^2n + 117mn^2$

283) $2y(18x^2 + 13xy - 8y^2)$

$36yx^2 + 26y^2x - 16y^3$

284) $19n^3(3m^2 - 18mn - 6n^2)$

$57n^3m^2 - 342n^4m - 114n^5$

285) $16y^2(15x^2 + xy + 11y^2)$

$240y^2x^2 + 16y^3x + 176y^4$

286) $4x^2(19x^2 - 15xy - 9y^2)$

$76x^4 - 60x^3y - 36x^2y^2$

287) $15(9x^2 - 10xy + 9y^2)$

$135x^2 - 150xy + 135y^2$

288) $18(13x^2 - 18xy - 14y^2)$

$234x^2 - 324xy - 252y^2$

289) $6(9u^2 + 14uv - 17v^2)$

$54u^2 + 84uv - 102v^2$

290) $3(12x^2 + 4xy + 20y^2)$

$36x^2 + 12xy + 60y^2$

291) $20v(8u^2 + 17uv - 6v^2)$

$160vu^2 + 340v^2u - 120v^3$

292) $8x^3y^2(6x^2 - 8xy + 8y^2)$

$48x^5y^2 - 64x^4y^3 + 64x^3y^4$

293) $5a^5b(12a^2 + 11ab - 5b^2)$

$60a^7b + 55a^6b^2 - 25a^5b^3$

294) $19(20x^2 + 6xy - 14y^2)$

$380x^2 + 114xy - 266y^2$

295) $11(a^2 - 10ab + 2b^2)$

$11a^2 - 110ab + 22b^2$

296) $7xy(14x^2 - 5xy - 4y^2)$

$98x^3y - 35x^2y^2 - 28xy^3$

297) $4mn^3(4m^2 - 4mn - 9n^2)$

$16m^3n^3 - 16m^2n^4 - 36mn^5$

298) $13y^4(2x^2 + 7xy + 7y^2)$

$26y^4x^2 + 91y^5x + 91y^6$

299) $9n(19m^2 + 20mn - 13n^2)$

$171nm^2 + 180n^2m - 117n^3$

300) $6y^2(3x^2 - 20xy + 14y^2)$

$18y^2x^2 - 120y^3x + 84y^4$

301) $27y^2(46x^2 + 13xy - 8y^2)$

$1242y^2x^2 + 351y^3x - 216y^4$

302) $15(47x^2 - 40xy - 45y^2)$

$705x^2 - 600xy - 675y^2$

303) $14u(48u^2 + 19uv + 19v^2)$

$672u^3 + 266u^2v + 266uv^2$

304) $2x(49x^2 + 37xy + 17y^2)$

$98x^3 + 74x^2y + 34xy^2$

$$305) \quad 2(8x^2 + 24xy + 20y^2)$$

$$16x^2 + 48xy + 40y^2$$

$$306) \quad 40v(48u^2 - 19uv + 22v^2)$$

$$1920vu^2 - 760v^2u + 880v^3$$

$$307) \quad 40a^4(24a^2 + 12ab - 49b^2)$$

$$960a^6 + 480a^5b - 1960a^4b^2$$

$$308) \quad 27(32x^2 + 32xy - 17y^2)$$

$$864x^2 + 864xy - 459y^2$$

$$309) \quad 2x^2y^2(11x^2 - xy - 2y^2)$$

$$22x^4y^2 - 2x^3y^3 - 4x^2y^4$$

$$310) \quad 40(45a^2 + 20ab - 36b^2)$$

$$1800a^2 + 800ab - 1440b^2$$

$$311) \quad 15(44m^2 - 5mn + 28n^2)$$

$$660m^2 - 75mn + 420n^2$$

$$312) \quad 27(31x^2 + 8xy + 47y^2)$$

$$837x^2 + 216xy + 1269y^2$$

$$313) \quad 27y^2(38x^2 - 23xy + 8y^2)$$

$$1026y^2x^2 - 621y^3x + 216y^4$$

$$314) \quad 14m^4(24m^2 - 25mn - 27n^2)$$

$$336m^6 - 350m^5n - 378m^4n^2$$

$$315) \quad 14y(19x^2 - 46xy - 18y^2)$$

$$266yx^2 - 644y^2x - 252y^3$$

$$316) \quad 2(30u^2 + 35uv + 36v^2)$$

$$60u^2 + 70uv + 72v^2$$

$$317) \quad 2x^2(41x^2 - 19xy - 40y^2)$$

$$82x^4 - 38x^3y - 80x^2y^2$$

$$318) \quad 27u(43u^2 - 45uv - 12v^2)$$

$$1161u^3 - 1215u^2v - 324uv^2$$

$$319) \quad 40x(44x^2 - 26xy - 14y^2)$$

$$1760x^3 - 1040x^2y - 560xy^2$$

$$320) \quad 40(42x^2 - 46xy + 38y^2)$$

$$1680x^2 - 1840xy + 1520y^2$$

$$321) \quad 27v^2(23u^2 - 9uv + 18v^2)$$

$$621v^2u^2 - 243v^3u + 486v^4$$

$$322) \quad 27b(42a^2 - 18ab + 38b^2)$$

$$1134ba^2 - 486b^2a + 1026b^3$$

$$323) \quad 14(40x^2 + 6xy - 36y^2)$$

$$560x^2 + 84xy - 504y^2$$

$$324) \quad 15y(43x^2 + xy + 37y^2)$$

$$645yx^2 + 15y^2x + 555y^3$$

$$325) \quad 2ab(29a^2 + 42ab + 24b^2)$$

$$58a^3b + 84a^2b^2 + 48ab^3$$

$$326) \quad 2(m^2 + 26mn + 9n^2)$$

$$2m^2 + 52mn + 18n^2$$

$$327) \quad 40y(15x^2 - 10xy + 47y^2)$$

$$600yx^2 - 400y^2x + 1880y^3$$

$$328) \quad 14xy^3(25x^2 + 16xy + 16y^2)$$

$$350x^3y^3 + 224x^2y^4 + 224xy^5$$

$$329) \quad 2m^3(41m^2 + 29mn - 46n^2)$$

$$82m^5 + 58m^4n - 92m^3n^2$$

$$330) \quad 27y(14x^2 - 8xy - 49y^2)$$

$$378yx^2 - 216y^2x - 1323y^3$$

$$331) \quad 40(38u^2 - 35uv - 27v^2)$$

$$1520u^2 - 1400uv - 1080v^2$$

$$332) \quad 40x^5(29x^2 + 30xy - 10y^2)$$

$$1160x^7 + 1200x^6y - 400x^5y^2$$

$$333) \quad 27(50x^2 - 47xy - 45y^2)$$

$$1350x^2 - 1269xy - 1215y^2$$

$$335) \quad 27(49x^2 - 15xy + 19y^2)$$

$$1323x^2 - 405xy + 513y^2$$

$$337) \quad 2x^4(39x^2 + 45xy + 5y^2)$$

$$78x^6 + 90x^5y + 10x^4y^2$$

$$339) \quad 40a(37a^2 - 17ab + 11b^2)$$

$$1480a^3 - 680a^2b + 440ab^2$$

$$341) \quad 15y(27x^2 + xy + 39y^2)$$

$$405yx^2 + 15y^2x + 585y^3$$

$$343) \quad 27y(10x^2 + 28xy + 16y^2)$$

$$270yx^2 + 756y^2x + 432y^3$$

$$345) \quad 27y^2(6x^2 - 38xy + 7y^2)$$

$$162y^2x^2 - 1026y^3x + 189y^4$$

$$347) \quad 27u(9u^2 - 46uv - 34v^2)$$

$$243u^3 - 1242u^2v - 918uv^2$$

$$349) \quad 2(19u^2 - 29uv + 18v^2)$$

$$38u^2 - 58uv + 36v^2$$

$$351) \quad 27u(40u^2 - 27uv - 36v^2)$$

$$1080u^3 - 729u^2v - 972uv^2$$

$$353) \quad 29a^3(40a^2 - 21ab - 39b^2)$$

$$1160a^5 - 609a^4b - 1131a^3b^2$$

$$355) \quad 27(43a^2 - 45ab - 36b^2)$$

$$1161a^2 - 1215ab - 972b^2$$

$$357) \quad 27(42m^2 + 31mn + 27n^2)$$

$$1134m^2 + 837mn + 729n^2$$

$$359) \quad 14y(4x^2 + 29xy + 32y^2)$$

$$56yx^2 + 406y^2x + 448y^3$$

$$334) \quad 15(37u^2 - 3uv + 37v^2)$$

$$555u^2 - 45uv + 555v^2$$

$$336) \quad 14u^2v(27u^2 - 9uv + 32v^2)$$

$$378u^4v - 126u^3v^2 + 448u^2v^3$$

$$338) \quad 2y(37x^2 + xy + 9y^2)$$

$$74yx^2 + 2y^2x + 18y^3$$

$$340) \quad 14b^2(22a^2 + 7ab + 44b^2)$$

$$308b^2a^2 + 98b^3a + 616b^4$$

$$342) \quad 40(34m^2 + 47mn + 14n^2)$$

$$1360m^2 + 1880mn + 560n^2$$

$$344) \quad 40n(10m^2 + 10mn - 39n^2)$$

$$400nm^2 + 400n^2m - 1560n^3$$

$$346) \quad 14y(9x^2 - 28xy - 36y^2)$$

$$126yx^2 - 392y^2x - 504y^3$$

$$348) \quad 14x(9x^2 + 36xy - 32y^2)$$

$$126x^3 + 504x^2y - 448xy^2$$

$$350) \quad 40x^2y(34x^2 + 13xy - 33y^2)$$

$$1360x^4y + 520x^3y^2 - 1320x^2y^3$$

$$352) \quad 14(6x^2 - 41xy - 45y^2)$$

$$84x^2 - 574xy - 630y^2$$

$$354) \quad 40y^2(44x^2 - 22xy - 35y^2)$$

$$1760y^2x^2 - 880y^3x - 1400y^4$$

$$356) \quad 39(29x^2 + 43xy + 46y^2)$$

$$1131x^2 + 1677xy + 1794y^2$$

$$358) \quad 27m^2n^2(41m^2 - 17mn - 45n^2)$$

$$1107m^4n^2 - 459m^3n^3 - 1215m^2n^4$$

$$360) \quad 14x^3y^3(49x^2 + 12xy + 6y^2)$$

$$686x^5y^3 + 168x^4y^4 + 84x^3y^5$$

- 361) $14u(4u^2 - 8uv + 36v^2)$
 $56u^3 - 112u^2v + 504uv^2$
- 363) $15(4x^2 - 27xy + 37y^2)$
 $60x^2 - 405xy + 555y^2$
- 365) $40(27u^2 + 2uv - 45v^2)$
 $1080u^2 + 80uv - 1800v^2$
- 367) $27y(2x^2 - 13xy - 14y^2)$
 $54yx^2 - 351y^2x - 378y^3$
- 369) $27x^4(42x^2 + 15xy + 19y^2)$
 $1134x^6 + 405x^5y + 513x^4y^2$
- 371) $27(12x^2 - 27xy - 17y^2)$
 $324x^2 - 729xy - 459y^2$
- 373) $27x^3(42x^2 + 10xy + 33y^2)$
 $1134x^5 + 270x^4y + 891x^3y^2$
- 375) $29x(23x^2 + xy - 4y^2)$
 $667x^3 + 29x^2y - 116xy^2$
- 377) $31(50u^2 - 28uv + 5v^2)$
 $1550u^2 - 868uv + 155v^2$
- 379) $27u(49u^2 + 36uv - 49v^2)$
 $1323u^3 + 972u^2v - 1323uv^2$
- 381) $27b^2(5a^2 - 46ab - 46b^2)$
 $135b^2a^2 - 1242b^3a - 1242b^4$
- 383) $12ab^2(43a^2 + 25ab - 32b^2)$
 $516a^3b^2 + 300a^2b^3 - 384ab^4$
- 385) $15b^2(4a^2 - 41ab - 50b^2)$
 $60b^2a^2 - 615b^3a - 750b^4$
- 387) $39y(21x^2 + 27xy - 33y^2)$
 $819yx^2 + 1053y^2x - 1287y^3$
- 362) $2y(4x^2 + 10xy + 34y^2)$
 $8yx^2 + 20y^2x + 68y^3$
- 364) $17y(34x^2 + 41xy + 33y^2)$
 $578yx^2 + 697y^2x + 561y^3$
- 366) $40b^3(32a^2 - 19ab + 34b^2)$
 $1280b^3a^2 - 760b^4a + 1360b^5$
- 368) $39a^2(38a^2 - 11ab + 34b^2)$
 $1482a^4 - 429a^3b + 1326a^2b^2$
- 370) $14(50a^2 - 14ab + 45b^2)$
 $700a^2 - 196ab + 630b^2$
- 372) $14(49m^2 - 39mn - 36n^2)$
 $686m^2 - 546mn - 504n^2$
- 374) $14m^3(48m^2 - 8mn + 23n^2)$
 $672m^5 - 112m^4n + 322m^3n^2$
- 376) $40y(50x^2 - 9xy + 3y^2)$
 $2000yx^2 - 360y^2x + 120y^3$
- 378) $39(22x^2 + 45xy - 46y^2)$
 $858x^2 + 1755xy - 1794y^2$
- 380) $39x(49x^2 + 18xy - 47y^2)$
 $1911x^3 + 702x^2y - 1833xy^2$
- 382) $14y^2(7x^2 - 44xy + 2y^2)$
 $98y^2x^2 - 616y^3x + 28y^4$
- 384) $14x^2(10x^2 - 40xy - 45y^2)$
 $140x^4 - 560x^3y - 630x^2y^2$
- 386) $17n(14m^2 - 35mn + 12n^2)$
 $238nm^2 - 595n^2m + 204n^3$
- 388) $40(20x^2 + 4xy - 36y^2)$
 $800x^2 + 160xy - 1440y^2$

389) $27m^2n^2(44m^2 + 46mn - 10n^2)$
 $1188m^4n^2 + 1242m^3n^3 - 270m^2n^4$

390) $39x^3y(31x^2 - 42xy + 44y^2)$
 $1209x^5y - 1638x^4y^2 + 1716x^3y^3$

391) $27y(20x^2 - 28xy + 16y^2)$
 $540yx^2 - 756y^2x + 432y^3$

392) $14(43u^2 + 32uv + 10v^2)$
 $602u^2 + 448uv + 140v^2$

393) $27(5x^2 - 25xy - 8y^2)$
 $135x^2 - 675xy - 216y^2$

394) $14(42u^2 - 37uv - 27v^2)$
 $588u^2 - 518uv - 378v^2$

395) $26(44x^2 - 45xy + 23y^2)$
 $1144x^2 - 1170xy + 598y^2$

396) $14a^2b^2(32a^2 - 21ab - 36b^2)$
 $448a^4b^2 - 294a^3b^3 - 504a^2b^4$

397) $29x^2y(44x^2 - 8xy + 18y^2)$
 $1276x^4y - 232x^3y^2 + 522x^2y^3$

398) $40b^2(4a^2 + 28ab + 24b^2)$
 $160b^2a^2 + 1120b^3a + 960b^4$

399) $39a(43a^2 - 37ab - 26b^2)$
 $1677a^3 - 1443a^2b - 1014ab^2$

400) $31x^3y(11x^2 + 26xy - 8y^2)$
 $341x^5y + 806x^4y^2 - 248x^3y^3$

401) $10x(85x^2 + 40xy + 73y^2)$
 $850x^3 + 400x^2y + 730xy^2$

402) $8(99m^2 - 99mn - 63n^2)$
 $792m^2 - 792mn - 504n^2$

403) $93n(48m^2 - 74mn - 66n^2)$
 $4464nm^2 - 6882n^2m - 6138n^3$

404) $51(10x^2 + 9xy + 29y^2)$
 $510x^2 + 459xy + 1479y^2$

405) $91y(36x^2 + 23xy + 22y^2)$
 $3276yx^2 + 2093y^2x + 2002y^3$

406) $33x^4(85x^2 - 55xy + 7y^2)$
 $2805x^6 - 1815x^5y + 231x^4y^2$

407) $74(86x^2 - 56xy - 87y^2)$
 $6364x^2 - 4144xy - 6438y^2$

408) $75u(12u^2 + 17uv - 4v^2)$
 $900u^3 + 1275u^2v - 300uv^2$

409) $15(99u^2 + 47uv + 11v^2)$
 $1485u^2 + 705uv + 165v^2$

410) $57xy(86x^2 + 59xy + 20y^2)$
 $4902x^3y + 3363x^2y^2 + 1140xy^3$

411) $56a^4(95a^2 - 37ab + 72b^2)$
 $5320a^6 - 2072a^5b + 4032a^4b^2$

412) $98x^2y(89x^2 + 74xy + 45y^2)$
 $8722x^4y + 7252x^3y^2 + 4410x^2y^3$

413) $40b(96a^2 - 6ab - 75b^2)$
 $3840ba^2 - 240b^2a - 3000b^3$

414) $80(86a^2 + 90ab - 12b^2)$
 $6880a^2 + 7200ab - 960b^2$

415) $38y^2(69x^2 + 12xy - 73y^2)$
 $2622y^2x^2 + 456y^3x - 2774y^4$

416) $22(55x^2 - 3xy + 85y^2)$
 $1210x^2 - 66xy + 1870y^2$

417) $20m(47m^2 - 18mn + 75n^2)$
 $940m^3 - 360m^2n + 1500mn^2$

418) $2y(67x^2 + 73xy - 64y^2)$
 $134yx^2 + 146y^2x - 128y^3$

419) $4n(79m^2 - 25mn + 49n^2)$
 $316nm^2 - 100n^2m + 196n^3$

421) $45x^2y(3x^2 - 87xy - 2y^2)$
 $135x^4y - 3915x^3y^2 - 90x^2y^3$

420) $63xy^2(99x^2 + 36xy - 55y^2)$
 $6237x^3y^2 + 2268x^2y^3 - 3465xy^4$

422) $86x(30x^2 - 37xy + 3y^2)$
 $2580x^3 - 3182x^2y + 258xy^2$

423) $27(67u^2 + 50uv + 56v^2)$
 $1809u^2 + 1350uv + 1512v^2$

425) $70(80x^2 - 43xy - 48y^2)$
 $5600x^2 - 3010xy - 3360y^2$

424) $87u(43u^2 + 67uv - 90v^2)$
 $3741u^3 + 5829u^2v - 7830uv^2$

426) $52a^2b^3(100a^2 - 31ab - 49b^2)$
 $5200a^4b^3 - 1612a^3b^4 - 2548a^2b^5$

427) $9y^2(87x^2 - 48xy + 76y^2)$
 $783y^2x^2 - 432y^3x + 684y^4$

429) $50x^2(50x^2 - 74xy - 71y^2)$
 $2500x^4 - 3700x^3y - 3550x^2y^2$

428) $68(49a^2 + 60ab + 50b^2)$
 $3332a^2 + 4080ab + 3400b^2$

430) $34(67x^2 - 5xy - 66y^2)$
 $2278x^2 - 170xy - 2244y^2$

431) $32m(78m^2 + 31mn - 12n^2)$
 $2496m^3 + 992m^2n - 384mn^2$

432) $93(55m^2 + 88mn + 37n^2)$
 $5115m^2 + 8184mn + 3441n^2$

433) $75x(66x^2 - 72xy + 76y^2)$
 $4950x^3 - 5400x^2y + 5700xy^2$

435) $57y(86x^2 + 14xy - 58y^2)$
 $4902yx^2 + 798y^2x - 3306y^3$

434) $16m^2n^4(50m^2 + 14mn - 27n^2)$
 $800m^4n^4 + 224m^3n^5 - 432m^2n^6$

436) $15y(98x^2 - 83xy + 56y^2)$
 $1470yx^2 - 1245y^2x + 840y^3$

437) $99(55u^2 + 34uv - 89v^2)$
 $5445u^2 + 3366uv - 8811v^2$

438) $98(67x^2 - 60xy + 8y^2)$
 $6566x^2 - 5880xy + 784y^2$

439) $39uv(22u^2 + 5uv - v^2)$
 $858u^3v + 195u^2v^2 - 39uv^3$

440) $82x(37x^2 + 2xy + 92y^2)$
 $3034x^3 + 164x^2y + 7544xy^2$

441) $80(61a^2 + 62ab + 99b^2)$
 $4880a^2 + 4960ab + 7920b^2$

443) $64a^3b(36a^2 + 33ab - 38b^2)$
 $2304a^5b + 2112a^4b^2 - 2432a^3b^3$

442) $21y^6(79x^2 - 35xy - 27y^2)$
 $1659y^6x^2 - 735y^7x - 567y^8$

444) $5x^4(85x^2 - 85xy + 15y^2)$
 $425x^6 - 425x^5y + 75x^4y^2$

445) $4m(32m^2 + 82mn - 67n^2)$
 $128m^3 + 328m^2n - 268mn^2$

446) $88(49m^2 - 100mn + 76n^2)$
 $4312m^2 - 8800mn + 6688n^2$

447) $87(17x^2 + 8xy - 28y^2)$
 $1479x^2 + 696xy - 2436y^2$

449) $28(30m^2 - 86mn + 70n^2)$
 $840m^2 - 2408mn + 1960n^2$

451) $71x^2(77x^2 - 30xy + 99y^2)$
 $5467x^4 - 2130x^3y + 7029x^2y^2$

448) $46(36x^2 - 7xy - 21y^2)$
 $1656x^2 - 322xy - 966y^2$

450) $69x^4y(69x^2 - 16xy - 41y^2)$
 $4761x^6y - 1104x^5y^2 - 2829x^4y^3$

452) $10(23u^2 + 32uv - 40v^2)$
 $230u^2 + 320uv - 400v^2$

453) $53(36x^2 - 62xy + 58y^2)$
 $1908x^2 - 3286xy + 3074y^2$

455) $94xy^2(93x^2 + 31xy + 34y^2)$
 $8742x^3y^2 + 2914x^2y^3 + 3196xy^4$

457) $34y(43x^2 + 41xy - 14y^2)$
 $1462yx^2 + 1394y^2x - 476y^3$

459) $17y^2(68x^2 - 40xy - 62y^2)$
 $1156y^2x^2 - 680y^3x - 1054y^4$

454) $51uv^3(48u^2 - 49uv - 57v^2)$
 $2448u^3v^3 - 2499u^2v^4 - 2907uv^5$

456) $35a(55a^2 - 57ab + 99b^2)$
 $1925a^3 - 1995a^2b + 3465ab^2$

458) $76b^3(41a^2 - 87ab + 86b^2)$
 $3116b^3a^2 - 6612b^4a + 6536b^5$

460) $16(36m^2 + 84mn - 69n^2)$
 $576m^2 + 1344mn - 1104n^2$

461) $58x(51x^2 + 28xy - 65y^2)$
 $2958x^3 + 1624x^2y - 3770xy^2$

463) $99(30x^2 + 6xy + 22y^2)$
 $2970x^2 + 594xy + 2178y^2$

465) $83x^2y(53x^2 + 100xy + 69y^2)$
 $4399x^4y + 8300x^3y^2 + 5727x^2y^3$

462) $7(39m^2 - 75mn + 22n^2)$
 $273m^2 - 525mn + 154n^2$

464) $40(99m^2 - 88mn - 81n^2)$
 $3960m^2 - 3520mn - 3240n^2$

466) $81x^2(97x^2 - 29xy - 76y^2)$
 $7857x^4 - 2349x^3y - 6156x^2y^2$

467) $23u^3v(69u^2 + 34uv + 30v^2)$
 $1587u^5v + 782u^4v^2 + 690u^3v^3$

469) $63(17u^2 + 44uv - v^2)$
 $1071u^2 + 2772uv - 63v^2$

468) $65(5x^2 - 64xy - 98y^2)$
 $325x^2 - 4160xy - 6370y^2$

470) $5(87x^2 - 49xy + 96y^2)$
 $435x^2 - 245xy + 480y^2$

471) $47(99a^2 + 58ab - 7b^2)$
 $4653a^2 + 2726ab - 329b^2$

472) $46xy(86x^2 + 100xy + 87y^2)$
 $3956x^3y + 4600x^2y^2 + 4002xy^3$

473) $88a^2(68a^2 - 13ab - 85b^2)$
 $5984a^4 - 1144a^3b - 7480a^2b^2$

475) $28(5m^2 + 87mn - 19n^2)$
 $140m^2 + 2436mn - 532n^2$

477) $12m(70m^2 - 30mn - 64n^2)$
 $840m^3 - 360m^2n - 768mn^2$

479) $52(11m^2 - 90mn - 37n^2)$
 $572m^2 - 4680mn - 1924n^2$

481) $93y(21x^2 - 43xy + 91y^2)$
 $1953yx^2 - 3999y^2x + 8463y^3$

483) $77xy(40x^2 + 65xy - 15y^2)$
 $3080x^3y + 5005x^2y^2 - 1155xy^3$

485) $59(68a^2 + 56ab + 43b^2)$
 $4012a^2 + 3304ab + 2537b^2$

487) $58xy^2(78x^2 + 93xy - 97y^2)$
 $4524x^3y^2 + 5394x^2y^3 - 5626xy^4$

489) $42x^2(87x^2 - 11xy - 53y^2)$
 $3654x^4 - 462x^3y - 2226x^2y^2$

491) $82(87x^2 - 8xy - 78y^2)$
 $7134x^2 - 656xy - 6396y^2$

493) $22x(88x^2 - 84xy - 57y^2)$
 $1936x^3 - 1848x^2y - 1254xy^2$

495) $6(93x^2 + 16xy - 90y^2)$
 $558x^2 + 96xy - 540y^2$

497) $47v(39u^2 + 100uv + 93v^2)$
 $1833vu^2 + 4700v^2u + 4371v^3$

499) $88uv(59u^2 + 67uv + 17v^2)$
 $5192u^3v + 5896u^2v^2 + 1496uv^3$

474) $29y(50x^2 + 84xy + 75y^2)$
 $1450yx^2 + 2436y^2x + 2175y^3$

476) $70xy(69x^2 + 49xy - 6y^2)$
 $4830x^3y + 3430x^2y^2 - 420xy^3$

478) $10x(57x^2 + 67xy + 24y^2)$
 $570x^3 + 670x^2y + 240xy^2$

480) $95y(33x^2 + 61xy + 3y^2)$
 $3135yx^2 + 5795y^2x + 285y^3$

482) $35u^2(59u^2 - 22uv - 45v^2)$
 $2065u^4 - 770u^3v - 1575u^2v^2$

484) $75(87u^2 + 42uv + 49v^2)$
 $6525u^2 + 3150uv + 3675v^2$

486) $17(99x^2 - 51xy - 55y^2)$
 $1683x^2 - 867xy - 935y^2$

488) $100a^3(80a^2 - 83ab - 14b^2)$
 $8000a^5 - 8300a^4b - 1400a^3b^2$

490) $40(74m^2 + 85mn + 25n^2)$
 $2960m^2 + 3400mn + 1000n^2$

492) $24mn(31m^2 + 56mn + 25n^2)$
 $744m^3n + 1344m^2n^2 + 600mn^3$

494) $65(81x^2 - 92xy + 13y^2)$
 $5265x^2 - 5980xy + 845y^2$

496) $4y(52x^2 + 7xy + 5y^2)$
 $208yx^2 + 28y^2x + 20y^3$

498) $89x(27x^2 - 4xy - 21y^2)$
 $2403x^3 - 356x^2y - 1869xy^2$

500) $29xy^3(15x^2 - 8xy - 22y^2)$
 $435x^3y^3 - 232x^2y^4 - 638xy^5$

501) $71(81a^2 + 54ab + 87b^2)$

$5751a^2 + 3834ab + 6177b^2$

503) $54x^3(95x^2 - 52xy - 79y^2)$

$5130x^5 - 2808x^4y - 4266x^3y^2$

505) $52(43m^2 + 83mn + 75n^2)$

$2236m^2 + 4316mn + 3900n^2$

507) $36(68m^2 + 98mn + 69n^2)$

$2448m^2 + 3528mn + 2484n^2$

509) $77x(6x^2 + 58xy - 56y^2)$

$462x^3 + 4466x^2y - 4312xy^2$

511) $59v^2(77u^2 + 11uv - 36v^2)$

$4543v^2u^2 + 649v^3u - 2124v^4$

513) $60x^2(96x^2 - 81xy - 60y^2)$

$5760x^4 - 4860x^3y - 3600x^2y^2$

515) $84(49a^2 + 57ab - 64b^2)$

$4116a^2 + 4788ab - 5376b^2$

517) $41xy(22x^2 + 74xy + 48y^2)$

$902x^3y + 3034x^2y^2 + 1968xy^3$

519) $66y^3(64x^2 - 45xy - 26y^2)$

$4224y^3x^2 - 2970y^4x - 1716y^5$

521) $6x(17x^2 + 16xy - 3y^2)$

$102x^3 + 96x^2y - 18xy^2$

523) $89(18x^2 - 91xy - 93y^2)$

$1602x^2 - 8099xy - 8277y^2$

525) $90(49x^2 + 2xy + 10y^2)$

$4410x^2 + 180xy + 900y^2$

527) $73x^2y^2(100x^2 - 43xy - 49y^2)$

$7300x^4y^2 - 3139x^3y^3 - 3577x^2y^4$

502) $70(49x^2 - 39xy - 16y^2)$

$3430x^2 - 2730xy - 1120y^2$

504) $11a^4(16a^2 + 39ab - 64b^2)$

$176a^6 + 429a^5b - 704a^4b^2$

506) $94(55x^2 - 10xy - 28y^2)$

$5170x^2 - 940xy - 2632y^2$

508) $78(37x^2 + 4xy - 39y^2)$

$2886x^2 + 312xy - 3042y^2$

510) $18x(95x^2 - 46xy + 32y^2)$

$1710x^3 - 828x^2y + 576xy^2$

512) $40(58x^2 + 46xy + 99y^2)$

$2320x^2 + 1840xy + 3960y^2$

514) $43u(46u^2 - 58uv - 14v^2)$

$1978u^3 - 2494u^2v - 602uv^2$

516) $25(62x^2 - 36xy + 34y^2)$

$1550x^2 - 900xy + 850y^2$

518) $23(30a^2 + 67ab - 75b^2)$

$690a^2 + 1541ab - 1725b^2$

520) $7m^4(42m^2 + 57mn + 35n^2)$

$294m^6 + 399m^5n + 245m^4n^2$

522) $48m(5m^2 - 87mn + 85n^2)$

$240m^3 - 4176m^2n + 4080mn^2$

524) $30x(69x^2 + 4xy - 49y^2)$

$2070x^3 + 120x^2y - 1470xy^2$

526) $71v^2(58u^2 - 75uv - 29v^2)$

$4118v^2u^2 - 5325v^3u - 2059v^4$

528) $55(37u^2 + 41uv - 13v^2)$

$2035u^2 + 2255uv - 715v^2$

$$529) \ 12(24x^2 - 67xy + 96y^2)$$

$$288x^2 - 804xy + 1152y^2$$

$$531) \ 37xy(22x^2 - 38xy - 97y^2)$$

$$814x^3y - 1406x^2y^2 - 3589xy^3$$

$$533) \ 35ab^2(31a^2 - 67ab - 56b^2)$$

$$1085a^3b^2 - 2345a^2b^3 - 1960ab^4$$

$$535) \ 78y(15x^2 + 72xy - 64y^2)$$

$$1170yx^2 + 5616y^2x - 4992y^3$$

$$537) \ 60m(36m^2 - 37mn + 4n^2)$$

$$2160m^3 - 2220m^2n + 240mn^2$$

$$539) \ 42(100x^2 + 15xy + 49y^2)$$

$$4200x^2 + 630xy + 2058y^2$$

$$541) \ 85(12x^2 - 79xy - 55y^2)$$

$$1020x^2 - 6715xy - 4675y^2$$

$$543) \ 67(5u^2 + 39uv + 37v^2)$$

$$335u^2 + 2613uv + 2479v^2$$

$$545) \ 65(18x^2 - 55xy - 67y^2)$$

$$1170x^2 - 3575xy - 4355y^2$$

$$547) \ 49x(71x^2 - 73xy + 82y^2)$$

$$3479x^3 - 3577x^2y + 4018xy^2$$

$$549) \ 90(24x^2 - 26xy - 79y^2)$$

$$2160x^2 - 2340xy - 7110y^2$$

$$551) \ 72(18m^2 + 91mn + 7n^2)$$

$$1296m^2 + 6552mn + 504n^2$$

$$553) \ 14x(54x^2 - 96xy + 5y^2)$$

$$756x^3 - 1344x^2y + 70xy^2$$

$$555) \ 54(12x^2 + 13xy + 99y^2)$$

$$648x^2 + 702xy + 5346y^2$$

$$530) \ 96ab(41a^2 + 75ab + 79b^2)$$

$$3936a^3b + 7200a^2b^2 + 7584ab^3$$

$$532) \ 53(49x^2 - 53xy + 84y^2)$$

$$2597x^2 - 2809xy + 4452y^2$$

$$534) \ 19n(60m^2 - 31mn + 29n^2)$$

$$1140nm^2 - 589n^2m + 551n^3$$

$$536) \ 18xy^2(80x^2 + 11xy - 8y^2)$$

$$1440x^3y^2 + 198x^2y^3 - 144xy^4$$

$$538) \ 100(11x^2 - 48xy - 22y^2)$$

$$1100x^2 - 4800xy - 2200y^2$$

$$540) \ 56(23x^2 + 60xy + 91y^2)$$

$$1288x^2 + 3360xy + 5096y^2$$

$$542) \ 83u^2(96u^2 + 40uv - 27v^2)$$

$$7968u^4 + 3320u^3v - 2241u^2v^2$$

$$544) \ 24x^3y(69x^2 - 20xy + 50y^2)$$

$$1656x^5y - 480x^4y^2 + 1200x^3y^3$$

$$546) \ 7(30a^2 + 53ab + 31b^2)$$

$$210a^2 + 371ab + 217b^2$$

$$548) \ 48ab(86a^2 - 31ab - 66b^2)$$

$$4128a^3b - 1488a^2b^2 - 3168ab^3$$

$$550) \ 30(5x^2 - 16xy - 90y^2)$$

$$150x^2 - 480xy - 2700y^2$$

$$552) \ 31n(34m^2 + 13mn - 57n^2)$$

$$1054nm^2 + 403n^2m - 1767n^3$$

$$554) \ 12x(42x^2 + xy + 93y^2)$$

$$504x^3 + 12x^2y + 1116xy^2$$

$$556) \ 97(81x^2 - 81xy - 5y^2)$$

$$7857x^2 - 7857xy - 485y^2$$

557) $95v^2(77u^2 - 41uv - 20v^2)$
 $7315v^2u^2 - 3895v^3u - 1900v^4$

558) $79u(82u^2 + 87uv - 66v^2)$
 $6478u^3 + 6873u^2v - 5214uv^2$

559) $77(87x^2 - 57xy - 22y^2)$
 $6699x^2 - 4389xy - 1694y^2$

560) $37x^2(58x^2 + 47xy + 4y^2)$
 $2146x^4 + 1739x^3y + 148x^2y^2$

561) $19(100a^2 + 51ab + 75b^2)$
 $1900a^2 + 969ab + 1425b^2$

562) $61(69x^2 - 42xy - 28y^2)$
 $4209x^2 - 2562xy - 1708y^2$

563) $60(81a^2 + 66ab + 69b^2)$
 $4860a^2 + 3960ab + 4140b^2$

564) $15y(4x^2 - 30xy - 34y^2)$
 $60yx^2 - 450y^2x - 510y^3$

565) $43m^3(16m^2 - 5mn + 15n^2)$
 $688m^5 - 215m^4n + 645m^3n^2$

566) $84(87m^2 + 94mn + 57n^2)$
 $7308m^2 + 7896mn + 4788n^2$

567) $26(100x^2 - 4xy - 46y^2)$
 $2600x^2 - 104xy - 1196y^2$

568) $42y(53x^2 - 40xy - 55y^2)$
 $2226yx^2 - 1680y^2x - 2310y^3$

569) $68x(73x^2 + 51xy + 12y^2)$
 $4964x^3 + 3468x^2y + 816xy^2$

570) $8(94x^2 - 83xy + 40y^2)$
 $752x^2 - 664xy + 320y^2$

571) $50(62u^2 + 25uv - 64v^2)$
 $3100u^2 + 1250uv - 3200v^2$

572) $66x(61x^2 - 52xy + 100y^2)$
 $4026x^3 - 3432x^2y + 6600xy^2$

573) $49y^2(96x^2 - 39xy + 11y^2)$
 $4704y^2x^2 - 1911y^3x + 539y^4$

574) $91(88u^2 + 40uv - 70v^2)$
 $8008u^2 + 3640uv - 6370v^2$

575) $32x(100x^2 + 28xy - 65y^2)$
 $3200x^3 + 896x^2y - 2080xy^2$

576) $31ab(40a^2 + 23ab + 90b^2)$
 $1240a^3b + 713a^2b^2 + 2790ab^3$

577) $73(81x^2 - 44xy + 22y^2)$
 $5913x^2 - 3212xy + 1606y^2$

578) $13(62x^2 - 30xy + 16y^2)$
 $806x^2 - 390xy + 208y^2$

579) $15(50a^2 + 63ab - 82b^2)$
 $750a^2 + 945ab - 1230b^2$

580) $56m^2(67m^2 - 23mn - 3n^2)$
 $3752m^4 - 1288m^3n - 168m^2n^2$

581) $98x^2(48x^2 + 65xy + 27y^2)$
 $4704x^4 + 6370x^3y + 2646x^2y^2$

582) $96(56m^2 + 92mn - 99n^2)$
 $5376m^2 + 8832mn - 9504n^2$

583) $38(69x^2 - xy - 2y^2)$
 $2622x^2 - 38xy - 76y^2$

584) $80(81x^2 - 94xy + 96y^2)$
 $6480x^2 - 7520xy + 7680y^2$

$$585) \quad 79xy^2(37x^2 - 66xy + 81y^2)$$
$$2923x^3y^2 - 5214x^2y^3 + 6399xy^4$$

$$586) \quad 62(75u^2 + 23uv - 14v^2)$$
$$4650u^2 + 1426uv - 868v^2$$

$$587) \quad 20x(79x^2 + 90xy - 100y^2)$$
$$1580x^3 + 1800x^2y - 2000xy^2$$

$$588) \quad 61y^3(43x^2 + 13xy - 67y^2)$$
$$2623y^3x^2 + 793y^4x - 4087y^5$$

$$589) \quad 2v^4(37u^2 + 16uv + 80v^2)$$
$$74v^4u^2 + 32v^5u + 160v^6$$

$$590) \quad 45(69x^2 - 56xy + 78y^2)$$
$$3105x^2 - 2520xy + 3510y^2$$

$$591) \quad 43a(18a^2 - 26ab - 58b^2)$$
$$774a^3 - 1118a^2b - 2494ab^2$$

$$592) \quad 85xy^2(93x^2 - 80xy + 68y^2)$$
$$7905x^3y^2 - 6800x^2y^3 + 5780xy^4$$

$$593) \quad 27(62a^2 + 61ab - 37b^2)$$
$$1674a^2 + 1647ab - 999b^2$$

$$594) \quad 25(31x^2 - 32xy + 60y^2)$$
$$775x^2 - 800xy + 1500y^2$$

$$595) \quad 68(44m^2 + 76mn - 43n^2)$$
$$2992m^2 + 5168mn - 2924n^2$$

$$596) \quad 9x^2(86x^2 - 22xy + 29y^2)$$
$$774x^4 - 198x^3y + 261x^2y^2$$

$$597) \quad 7mn(68m^2 + 66mn + 53n^2)$$
$$476m^3n + 462m^2n^2 + 371mn^3$$

$$598) \quad 92(50x^2 - 96xy - 55y^2)$$
$$4600x^2 - 8832xy - 5060y^2$$

$$599) \quad 50(37x^2 - 3xy + 48y^2)$$
$$1850x^2 - 150xy + 2400y^2$$

$$600) \quad 91(62x^2 + 12xy + 42y^2)$$
$$5642x^2 + 1092xy + 3822y^2$$