

Multiplying polynomials

Algebra 1 Notes

When you are multiplying polynomials you multiply the coefficient and add the exponents.

Ex

$$-7x^3(4x^2) = -28x^5$$

x^{3+2}

X X X X X
X⁵

Try

1) $5a^2(2a^4) = 10a^6$

3) $6c^3(-8c) = -48c^4$

5) $gh(gh) = g^2h^2$

2) $(3m^2c)(-4m^4c^5) = -12m^6c^6$

4) $6a^3c^5(8a^4c^6) = 48a^7c^{11}$

6) $(-2x^4z)(-5x^2y) = 10x^6zy$
 $10x^6y^1z^1$

When you are multiplying a monomial by a binomial you must use the dist. property.

Ex $3x(4x - 6) = 12x^2 - 18x$

8) $-4m^4(3m^2 - 2) =$

$$-12m^6 + 8m^4$$

7) $-2c^2(2c - 4) =$

$$-4c^3 + 8c^2$$

9) $-8(-x^2 - 2x - 9) =$

$$8x^2 + 16x + 72$$