

Section 4.3 Focus Exercises

1. Find the product. (You may do these in just one step if you wish.)

a) $(3y^2)(-2y^3)$

b) $(-x^4)(2x)$

c) $(3ab)(-a^6b^2)$

d) $(5y^4)^2$

e) $(-3c^2)^2$

f) $(-p^3)^2$

g) $(6a^4b)^2$

h) $(wxy)^2$

i) $(-4x^3y^5)^2$

2. Find the product. Be sure to write the result in *descending order*.

a) $3y(2y^5 - y^2)$

b) $-8x^2(x - 5 + 2x^2)$

c) $-a^3(-a^3 - 5 + a)$

d) $2x^2(3x - 9 + x^3 - 6x^2)$

3. Find each product. Combine like terms, and write the answer in descending order.

a) $(x + 4)(x + 7)$

b) $(x - 8)(x - 5)$

c) $(x + 3)(x - 12)$

d) $(x - 2)(x + 6)$

4. Find each product. Combine like terms, and write the answer in descending order.

a) $(4x + 2)(x - 3)$

b) $(9x - 2)(3x + 1)$

c) $(-2x - 3)(5x - 4)$

d) $(x^2 - 1)(x^2 - 6)$

e) $(4x + 3)(x^2 - 3x - 2)$

f) $(x^2 - 3)(2x + 3 - x^2)$

g) $(x - 6)(x + 6)$

h) $(y + 5)(y - 5)$

i) $(2p + 9)(2p - 9)$

j) $(-4m + 1)(-4m - 1)$

k) $(4x^2 - 3)(4x^2 + 3)$

l) $(5x^3 - 1)(5x^3 + 1)$