

# Properties of Exponents

## Properties of Exponents

1.  $x^m \cdot x^n = x^{m+n}$

2.  $\frac{x^m}{x^n} = x^{m-n}$

3.  $(x^m)^n = x^{m \cdot n}$

Directions: Simplify.

1.  $3g^7 \cdot 2g^2$

2.  $-8x \cdot 2x^3 \cdot 4x^5$

3.  $\frac{12x^8}{x^2}$

4.  $\frac{56f^7}{14f^9}$

5.  $(3x^2y)(9xy^4)$

6.  $(4m^3)^2$

7.  $(9m^2n^3)^3$

8.  $\frac{(6x)^2}{60x^3y}$

9.  $\frac{15a \cdot 15a}{120a^2}$

10.  $\frac{7b^4 \cdot 6b^3}{28b^{10}}$