

Algebra I
 Chapter 10 Review Warm-Up
 Properties of Exponents

NAME: _____
 DATE: _____ HOUR: _____

Complete the following properties.

$$b^0 = \underline{\hspace{2cm}}$$

$$b^{-n} = \underline{\hspace{2cm}}$$

$$b^m \cdot b^n = \underline{\hspace{2cm}}$$

$$\frac{b^m}{b^n} = \underline{\hspace{2cm}}$$

$$(b^m)^n = \underline{\hspace{2cm}}$$

$$(ab)^n = \underline{\hspace{2cm}}$$

$$\left(\frac{a}{b}\right)^n = \underline{\hspace{2cm}}$$

In 1-6, choose the best answer.

1. $n^2 n^3 = \underline{\hspace{2cm}}$
 (a) n^6 (b) n^5 (c) n^9 (d) n^1

2. $(n^2)^3 = \underline{\hspace{2cm}}$
 (a) n^6 (b) n^5 (c) n^9 (d) n^1

3. $\frac{x^6}{x^2} = \underline{\hspace{2cm}}$
 (a) x^8 (b) x^{12} (c) x^3 (d) x^4

4. $\frac{x^a}{x^b} = \underline{\hspace{2cm}}$
 (a) x^{b-a} (b) x^{a-b} (c) $x^{\frac{a}{b}}$ (d) $x^{\frac{b}{a}}$

5. $\frac{x^6}{x^3} = \underline{\hspace{2cm}}$
 (a) x^2 (b) x^3 (c) 2 (d) 1

6. $\left(\frac{m}{n}\right)^2 = \underline{\hspace{2cm}}$
 (a) $\frac{2m}{n}$ (b) $\frac{m}{n}$ (c) $\frac{2m}{2n}$ (d) $\frac{m^2}{n^2}$

over