Name: _____

Date: _____ Hour:___

Properties of Exponents - Practice

Simplify the following:

1. $(d^3n^{-2})^2(d^{-2}n^4)^3$

2. $\frac{x^0y^{-7}z^{12}}{w^{-4}z^6}$

3. $(t^3s^{-4})^{-3}$

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

5. $\frac{5x^9y^{12}}{x^4y^5}$

6. $(z^0y^3x^{-8})^2$

7. Choose **ALL** correct answers. Which of the following expressions is equivalent to $\frac{1}{x^3}$ when simplified?

A. $(x^3)^{-3} \cdot x^6$	B. $(x^9 \cdot x^{-6})^{-1}$
C. $(x^{-9} + x^6)^{-1}$	D. $(x^{15})^{-2} \cdot x^{-10}$

8. **Describe** and **correct** the error in evaluating the expression:

$$5^{-2} = \frac{1}{(-5)(-5)}$$
$$= -\frac{1}{25}$$

9. Choose **ALL** correct answers. Which of the following expressions is equivalent to w^2 when simplified?

A. $(w^4)^{-2} \cdot w^{10}$	B. $(w^2 \cdot w^{-4})^{-1}$
C. $(w^{-8} + w^6)^{-1}$	D. $(w^6)^{-2} \cdot w^{-3}$