Properties of Exponents Worksheet

Name_____ **Class Period**_____

I. Evaluate the expression.

1. $(2^5)(2^3)$

2. $\frac{4^7}{4^3}$

3. $(-7x)^2(-7x)^4$

4. $(5y^{-2})^2$

5. $\frac{8m^{-4}}{8m^2}$

6. $(4^0w^2)^{-5}$

7. $(2m^3n^{-1})(8m^4n^{-2})$

8. $\frac{x^5y^{-8}}{x^5y^{-6}}$

II. Write an expression that makes the statement true.

9. $\left(a^4b^{-3}c^5\right)(\,?\,) = a^8bc^{10}$

10. $\dfrac{?}{x^2y^6z} = \dfrac{x}{y^2}$

III. Describe and correct the error.

11. $\dfrac{x^{10}}{x^2} = x^5$

12. $(x^5)(x^3) = x^{15}$