

Name _____

Exponent Review 2

Directions: Evaluate each expression. Leave your answer in exponential form. You may *not* leave negative exponents in your answer. You must show work for each question.

1) $4^3 \times 4^5$

5) $\frac{2^8}{2^2}$

2) $x^6 \times x^8$

6) $\frac{b^4}{b^{-8}}$

3) $2^{-3} \times 2^8$

7) $\frac{9^{-10}}{9^{-6}}$

4) $1^{-13} \times 1^{15}$

8) $\frac{m^{32}}{m^{12}}$

9) $(5^3)^2$

11) $\frac{12a^8b^{10}}{2a^5b}$

10) $(a^{-3})^4$

12) $(-5x^3y^6)(3x^2y^2)$

**Directions: Evaluate each expression. Leave your answer in standard form.
(No exponents)**

13) $\left(\frac{3}{4}\right)^2$

15) $\left(\frac{1}{2}\right)^{-3}$

14) 8^0

16) $\frac{4^{17}}{4^{15}}$

18) Part A

Evaluate the expression below. Keep your answer in exponential form:

$$(w^3)^4$$

Answer _____

Part B

Explain how you came to your answer. Be specific.
