

Name _____

Exponents Review

Simplify. Write your answer in standard form.

1. 10^3 _____

2. 10^{-4} _____

3. 3^{-3} _____

4. 22^0 _____

5. 4^{-2} _____

6. 2^3 _____

7. $(7-4)^{-2}$ _____

8. $4^{-1} + (7-5)^{-2}$ _____

Simplify. Use the exponent rules to answer the questions in exponential form.

9. $\frac{3^6}{3^3}$ _____

10. $7^9 \cdot 7^2$ _____

11. $(5^{10})^6$ _____

12. $\frac{11^{-17}}{11^7}$ _____

13. $27^3 \cdot 27^{-18}$ _____

14. $13^0 \cdot 13^9$ _____

15. $\frac{18^{12}}{18^7}$ _____

16. $(x^2)^3 \cdot x^5$ _____

17. $2x^5 \cdot 3x^4$ _____

18. $\frac{10y^4z^8}{2yz^2}$ _____

$a^m \cdot a^n =$	$a^0 =$
$(a^m)^n =$	$a^1 =$
$(ab)^n =$	$a^{-n} =$
$a^m \cdot b^m =$	$\frac{a^m}{a^n} =$

Simplify each expression below.

A. $p^2 \cdot p^6$ B. $(k^8)^4$ C. $(3y)^3$ D. $\frac{2^6}{2^3}$

E. $\frac{8^{10}}{8^8}$ F. $\frac{m^2}{m^5} \cdot \frac{m^5}{m^8}$ G. 10^{-2} H. 5^0

I. $\frac{2^3}{3}$ J. $(\frac{2}{3})^3$ K. -2^4 L. $(-2)^4$

M. $\frac{2}{3}(4^2 + 2^3)$ N. $\frac{5}{4^2} + \frac{1}{2^3}$ O. $x^5 x^{12}$ P. $5x^{-3}$