

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## 8th Grade Pre-Algebra Section 4.3 Worksheet

Simplify each expression.

1.  $\frac{(-5)^4}{(-5)^3}$

5.  $\frac{6^5 \cdot 6^3}{6^4}$

2.  $4^5 \cdot \frac{1}{4^2}$

6.  $\left(-\frac{6}{z}\right)^3$

3.  $\left(\frac{a}{b}\right)^{13}$

7.  $\left(\frac{m^4}{5n^9}\right)^3$

4.  $\frac{1}{m^4} \cdot m^8$

8.  $\left(-\frac{c}{d}\right)^7$

$$9. \left( \frac{3x^7}{2y^{12}} \right)^4$$

$$12. \frac{1}{4x^5} \cdot \left( \frac{2x^2}{y^3} \right)^5$$

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$$10. 10^8 \cdot \left( \frac{1}{10} \right)^3$$

$$13. \frac{3y^3}{5} \cdot \left( \frac{10x^7}{9y^8} \right)^2$$

$$11. \left( \frac{3x^5}{10y^2} \right)^3 \cdot \frac{5}{x^4}$$

$$14. \left( -\frac{6}{x} \right)^3 \cdot \left( \frac{x^4}{3y^7} \right)^5$$