

Name _____ Date _____

Laws of Exponents (L.O.E.)

A. Multiplying with Exponents $\left\{ \begin{array}{l} 1) \text{ Keep Base} \\ 2) \text{ Add Exponents} \end{array} \right.$

1) $x^2 y^3 \cdot x^5 y^6$

2) $abc(a^3 b^5 c^9)$

3) $5^2 x^3 \cdot 5^5 x^8$

4) $(2^3 t v^4)(2^4 t^5 v)$

5) $(3x^3 y^4 z^5)(5x y^{12} z^9)$

6) $-5x^2 \cdot 4x^2$

B. Dividing with Exponents $\left\{ \begin{array}{l} \text{Keep Base} \\ \text{Subtract Exponents} \end{array} \right.$

7)
$$\frac{x^3 y^5}{x^2 y^4}$$

8)
$$\frac{def^4}{def^3}$$

