

Name: _____ Period: _____ Date: _____

Division Properties of Exponents Exit Quiz

Evaluate the following expressions.

1. $\frac{2^4}{4} = \frac{2^4}{2^2}$

2. $\frac{20a^{15}}{4a^6}$

3. $\left(\frac{5a^2b}{15ab^2}\right)^2$

4. $\left(\frac{4a}{x}\right)\left(\frac{3x}{8a^3}\right)$

5. $\left(\frac{5ab}{2x}\right)^2\left(\frac{4x^2}{25a^4b}\right)$

Division Properties of Exponents Exit Quiz

Answer:

Evaluate the following expressions.

$$1. \quad \frac{2^4}{4} = \frac{2^4}{2^2} = 2^2 = 4$$

$$3. \quad \left(\frac{5a^2b}{15ab^2} \right)^2 = \left(\frac{a}{3b} \right)^2 = \frac{a^2}{9b^2}$$

$$5. \quad \left(\frac{5ab}{2x} \right)^2 \left(\frac{4x^2}{25a^4b} \right) = \left(\frac{25a^2b^2}{4x^2} \right) \left(\frac{4x^2}{25a^4b} \right) = \frac{b}{a^2}$$

$$2. \quad \frac{20a^{15}}{4a^6} = 5a^9$$

$$4. \quad \left(\frac{4a}{x} \right) \left(\frac{3x}{8a^3} \right) = \frac{3}{2a^2}$$