

Level 3

Kuta Software - Infinite Algebra 1

Name _____

More Properties of Exponents

Date _____

Period _____

Simplify. Your answer should contain only positive exponents.

1) $(x^{-2}x^{-3})^4$

2) $(x^4)^{-3} \cdot 2x^4$

3) $(n^3)^3 \cdot 2n^{-1}$

4) $(2v)^2 \cdot 2v^2$

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

6) $\frac{2y^3 \cdot 3xy^3}{3x^2y^4}$

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

8) $\frac{3x^2y^2}{2x^{-1} \cdot 4yx^2}$

9) $\frac{x}{(2x^0)^2}$

10) $\frac{2m^{-4}}{(2m^{-4})^3}$

More Properties of Exponents

Simplify. Your answer should contain only positive exponents.

1) $(x^{-2}x^{-3})^4$

$$\frac{1}{x^{20}}$$

2) $(x^4)^{-3} \cdot 2x^4$

$$\frac{2}{x^8}$$

3) $(n^3)^3 \cdot 2n^{-1}$

$$2n^8$$

4) $(2v)^2 \cdot 2v^2$

$$8v^4$$

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

$$8x^8y^6$$

6) $\frac{2y^3 \cdot 3xy^3}{3x^2y^4}$

$$\frac{2y^2}{x}$$

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

$$\frac{x^4y^3}{4}$$

8) $\frac{3x^2y^2}{2x^{-1} \cdot 4yx^2}$

$$\frac{3xy}{8}$$

9) $\frac{x}{(2x^0)^2}$

$$\frac{x}{4}$$

10) $\frac{2m^{-4}}{(2m^{-4})^3}$

$$\frac{m^8}{4}$$