

8.EE.1 Laws of Exponents Final Review Day 2

Date _____ Period _____

Simplify. Your answer should contain only positive exponents. Show laws being used.

1) $4u^3v^2 \cdot 3u^{-3}v^{-4}$

2) $\frac{4ab^4}{3b^{-3}}$

3) $(2m^{-2}n^{-3} \cdot m^3n^{-1})^4$

4) $\frac{p^{-2}p^4}{2p}$

5) $(ab^{-1})^2 \cdot (a^2b^{-2})^3$

6) $\frac{2xy^2}{3x^4y^2 \cdot 4x^0y^2}$

7) $\frac{2x^4}{(2yx^2)^{-2}}$

8) $\frac{y^{-3}}{2yx^{-2}}$

#10-12 are challenge problems. Try your best! These are NOT optional.

9) $-x^2y^4z^{-3} \cdot (2x^{-4}y^3z^{-1} \cdot -x^3y^{-3}z^{-4})^2$

10) $\frac{a^2c^2 \cdot 2a^3b^4c^{-1} \cdot 2b^2c^3}{(ab^{-2}c^{-2})^{-4}}$

11) $\frac{(-2x^3y^0 \cdot -x^3y^2z^{-1})^4}{(xy^{-1}z^4 \cdot x^4)^{-4}}$

12) $\left(\frac{2jh^4k^2 \cdot 2jkh^3}{2h^{-3}k^2 \cdot 2kh^{-4}j^{-3}} \right)^2$

Answers to 8.EE.1 Laws of Exponents Final Review Day 2

$$1) \frac{12}{v^2}$$

$$5) \frac{a^8}{b^8}$$

$$9) -\frac{4y^4}{z^{13}}$$

$$2) \frac{4b^7a}{3}$$

$$6) \frac{1}{6x^3y^2}$$

$$10) \frac{4a^9}{b^2c^4}$$

$$3) \frac{16m^4}{n^{16}}$$

$$7) 8y^2x^8$$

$$11) 16x^{44}y^4z^{12}$$

$$4) \frac{p}{2}$$

$$8) \frac{x^2}{2y^4}$$

$$12) h^{28}j^{10}$$