

Ch 7.2 C Division Prop. of Exponents

Date _____ Period _____

Simplify. Your answer should contain only positive exponents.

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

$\frac{1}{2}$

2) $\frac{4^{-1}}{4^3}$

$\frac{1}{4^4}$

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

$\frac{1}{3^2}$

4) $\frac{5^2}{5^0}$

5^2

5) $\frac{k}{k^4}$

$\frac{1}{k^3}$

6) $\frac{x^4}{2x}$

$\frac{x^3}{2}$

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

$\frac{4m^5}{3}$

8) $\frac{p^{-4}}{2p^{-3}}$

$\frac{1}{2p}$

9) $\frac{2k^3}{3k^0}$

$\frac{2k^3}{3}$

10) $\frac{3y^{-4}}{4x^{-4}y^4}$

$\frac{3x^4}{4y^8}$

$$11) \frac{4x^2y^2}{2yx^{-1}}$$
$$2x^3y$$

$$12) \frac{4v^2}{2v^{-1}}$$
$$2v^3$$

$$13) \frac{4n^2}{nm^{-3}}$$
$$4m^3n$$

$$14) \frac{2x^4y^2}{x^3y^3}$$
$$\frac{2x}{y}$$

$$15) \frac{3x^0y^{-3}}{3x^{-2}y^{-1}}$$
$$\frac{x^2}{y^2}$$

$$16) \frac{2jk^2}{2j^4k^{-1}}$$
$$\frac{k^3}{j^3}$$

$$17) \frac{rp^4q^{-2}}{q^4r^2}$$
$$\frac{p^4}{q^6r}$$

$$18) \frac{x^{-2}y^{-3}z^4}{2x^{-3}y^3}$$
$$\frac{z^4x}{2y^6}$$

$$19) \frac{ab^2c^{-2}}{4ba^3c^{-2}}$$
$$\frac{b}{4a^2}$$

$$20) \frac{4v^0}{2u^4v^2}$$
$$\frac{2}{u^4v^2}$$

$$21) \left(\frac{x^3}{x^4} \right)^{-3}$$

$$x^3$$

$$22) \left(\frac{2a^{-4}}{2a^2} \right)^2$$

$$\frac{1}{a^{12}}$$

$$23) \left(\frac{n^2}{2n^4} \right)^{-4}$$

$$16n^8$$

$$24) \left(\frac{x^{-2}y^2}{2x^0y^4} \right)^2$$

$$\frac{1}{4x^4y^4}$$

$$25) \left(\frac{2m^3n^4}{m^4n^{-2}} \right)^4$$

$$\frac{16n^{24}}{m^4}$$

$$26) \left(\frac{2x^{-3}y^3}{xy^4} \right)^{-2}$$

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

$$27) \left(\frac{p^4q^{-1}}{2m^0p^2q^{-4}} \right)^0$$

$$1$$

$$28) \left(\frac{2p^3q^0}{2m^0q^2} \right)^{-2}$$

$$\frac{q^4}{p^6}$$

$$29) \frac{(xy^{-4})^4}{x^3y^3}$$

$$\frac{x}{y^{19}}$$

$$30) \frac{(2x^4y^{-4})^{-3}}{x^2y^{-2}}$$

$$\frac{y^{14}}{8x^{14}}$$