

WS - Quotient Property of Exponents

Date _____ Period _____

Simplify. Your answer should contain only positive exponents.

1) $\frac{6u^5v^6}{6u^{10}v^8}$

$\frac{1}{u^5v^2}$

2) $\frac{10a^7b^9}{8a^7}$

$\frac{5b^9}{4}$

3) $\frac{9x^7y^0}{4y^6}$

$\frac{9x^7}{4y^6}$

4) $\frac{2m^{10}n^6}{8m^2n^0}$

$\frac{m^8n^6}{4}$

5) $\frac{yx^6}{4x^2y^3}$

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

6) $\frac{6n}{2m^2n^4}$

$\frac{3}{m^2n^3}$

7) $\frac{4u^2v^3}{6vu^8}$

$\frac{2v^2}{3u^6}$

8) $\frac{2xy^4}{10x^4y^4}$

$\frac{1}{5x^3}$

9) $\frac{7y^3}{7y^{10}}$

$\frac{1}{y^7}$

10) $\frac{9n^0}{6m^2n^3}$

$\frac{3}{2m^2n^3}$

11) $\frac{9u^7v^3}{6v^6}$

$\frac{3u^7}{2v^3}$

12) $\frac{8x^8y^6}{4xy^5}$

$2x^7y$

13) $\frac{2a^4b^0}{3ab^3} \frac{2a^3}{3b^3}$

14) $\frac{x^{-4}y^2}{2x^0y^{-4}} \frac{y^6}{2x^4}$

$$15) \frac{3x^{-1}y^{-2}}{3x^2y^{-4}} \cdot \frac{y^2}{x^3}$$

$$16) \frac{a^0b^0}{(b^6)^3}$$

$$\frac{1}{b^{18}}$$

$$17) \left(\frac{u^4}{u^8v^3}\right)^6$$

$$\frac{1}{u^{24}v^{18}}$$

$$18) \left(\frac{2y^4}{x^4y^5}\right)^5$$

$$\frac{32}{x^{20}y^5}$$

$$19) \left(\frac{2a^7}{a^2}\right)^4$$

$$16a^{20}$$

$$20) \left(\frac{u^2}{u^3v^3}\right)^7$$

$$\frac{1}{u^7v^{21}}$$

$$21) \left(\frac{2x^3y^5}{2xy^8}\right)^2$$

$$\frac{x^4}{y^6}$$

$$22) \left(\frac{xy^3}{x^6y^8}\right)^2$$

$$\frac{1}{x^{10}y^{10}}$$

$$23) \left(\frac{2x^7y^7}{2x^6y^6}\right)^0$$

$$1$$

$$24) \left(\frac{a^6b^0}{a^4b^8}\right)^2$$

$$\frac{a^4}{b^{16}}$$

$$25) \left(\frac{x^3}{2x^0y^7}\right)^2$$

$$\frac{x^6}{4y^{14}}$$

$$26) \left(\frac{2x^5y^8}{(2x^{-6})^{-1}}\right)^3$$

$$\frac{64y^{24}}{x^3}$$

$$27) \frac{2x^{-5}y^5}{(2x^3y^4)^2}$$

$$\frac{1}{2x^{11}y^3}$$

$$28) \frac{(2x^{-2})^{-1}}{2xy^5}$$

$$\frac{x}{4y^5}$$

$$29) \frac{x^3y^{-7}}{(y^2)^{-4}}$$

$$x^3y$$

$$30) \frac{2x^2}{(2x^8y^{-2})^{-3}}$$

$$\frac{16x^{26}}{y^6}$$