

## WS 3.3B Division Property and Literal Equations

Solve each equation for the indicated variable.

1)  $\frac{k}{a} = vw$ , for  $a$

2)  $xk = vw$ , for  $x$

3)  $m - x = p - n$ , for  $x$

4)  $g = \frac{cb}{a}$ , for  $a$

Solve each equation for  $y$ .

5)  $4x - 7y = -7$

6)  $2x + 9y = -5$

7)  $4x + 7y = -49$

8)  $x + 4y = -13$

**Simplify. Your answer should contain only positive exponents.**

9)  $\frac{5x^{10}y^3}{10x^5y^5}$

10)  $\frac{8xy^{10}}{4x^{10}y^3}$

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

12)  $\frac{10x^9y^8z^5}{8x^4y^6z^4}$

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

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

15)  $\frac{2a^{-2}b^4}{b^4}$

16)  $\frac{3xy^0}{3xy^4}$

17)  $\frac{(ba^2)^2}{2a^4b^{-2}}$

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