

## SM2 HW #6-4 (Elimination)

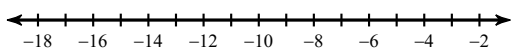
Date \_\_\_\_\_ Period \_\_\_\_\_

**Solve each equation.**

1)  $|v - 7| = 4$

**Solve each inequality and graph its solution.**

2)  $|a + 10| \leq 7$



3) Properties of equality and inequality are the same except for which operations?

4) Solve for 'k'

$$3k - 2m - 5 = -4m + 6$$

5) The area of a rectangle is 300 square meters. If the width is 12.5 meters, what is the perimeter?

6) The perimeter of a rectangular is given by the following formula:

$$P = 2W + 2L \quad \text{Solve for } W$$

**Simplify.**

7)  $(8 + 5i)(4 - 4i)$

8)  $4ab \cdot 3b^3$

**Solve each equation.**

9)  $101 = 6(3 + 2n) - 1$

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

10)  $4x^{-2} \cdot 2x^{-2}y^4$

11)  $\left(\frac{x^{-3}y^3}{x^3}\right)^{-1}$

**Solve each system by elimination.**

$$\begin{aligned} 12) \quad & -2x + 2y = -16 \\ & x - 2y = 16 \end{aligned}$$

$$\begin{aligned} 13) \quad & 8x - 3y = 10 \\ & -8x + 7y = 30 \end{aligned}$$

$$\begin{aligned} 14) \quad & 16x + 9y = 2 \\ & -8x + 2y = 12 \end{aligned}$$

$$\begin{aligned} 15) \quad & -12x - 8y = -7 \\ & 6x + 4y = 2 \end{aligned}$$

$$\begin{aligned} 16) \quad & -5x - 10y = -30 \\ & -4x - 6y = -24 \end{aligned}$$

$$\begin{aligned} 17) \quad & 3x - 3y = 21 \\ & -4x + 8y = -16 \end{aligned}$$