

Summer Assignment

Date _____ Period _____

Solve each equation.

1) $-4 - 2x = -5(1 + 2x) + 7x$

2) $-2 + 2(k + 7) = 12 + 3k$

3) $-20 - 2n = -6(n + 6)$

4) $-4(n + 4) = -5n - 11$

5) $-7(-k - 6) = 39 + 8k$

6) $5(4n + 7) = -40 + 5n$

7) $8 - 8r = 8(1 + 7r)$

8) $20 - 8x = -7(2x - 8)$

9) $-7 - (6 + 7k) = -11 - 8k$

10) $-37 - 5a = -3(6a + 8)$

Solve each proportion.

11) $\frac{p}{3} = \frac{3}{8}$

12) $\frac{10x}{5} = \frac{9}{3}$

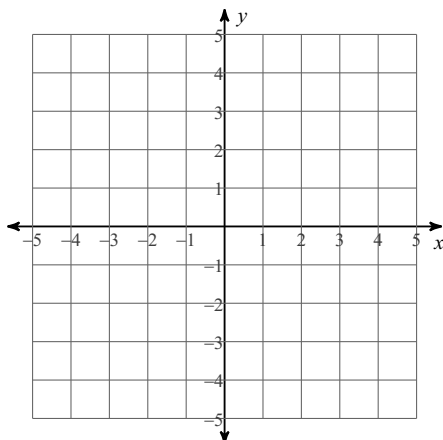
13) $\frac{m}{8} = \frac{9}{2}$

14) $\frac{3}{a} = \frac{2}{10}$

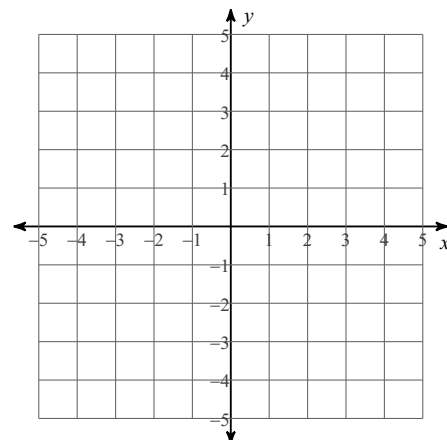
15) $\frac{9}{x} = \frac{4}{8}$

Solve each system by graphing.

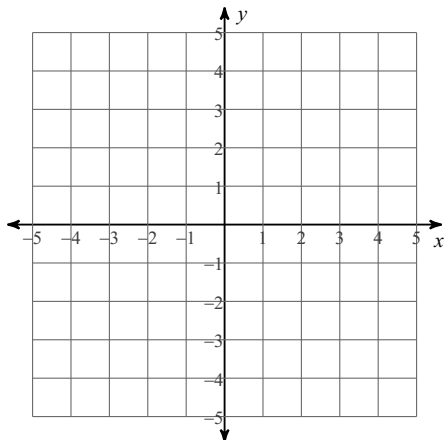
16) $-x - 2y + 6 = 0$
 $0 = -2x + y + 2$



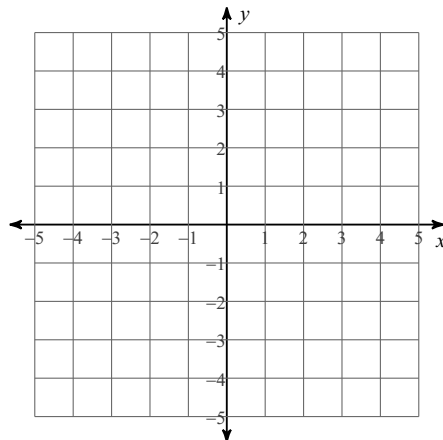
17) $2y + 4 + 2x = 0$
 $6 - 3y + 9x = 0$



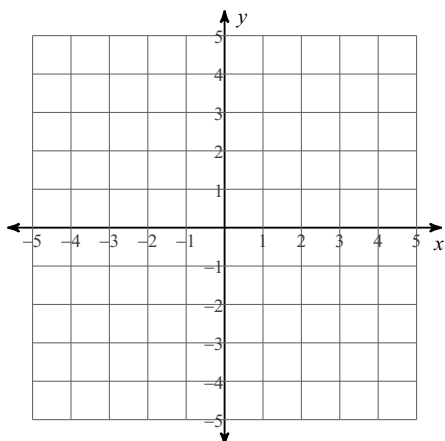
$$18) \begin{aligned} 1 &= -x - y \\ 12y &= 3x + 48 \end{aligned}$$



$$19) \begin{aligned} 2x - 2 &= -y \\ -12 - 3y &= -3x \end{aligned}$$



$$20) \begin{aligned} 16 &= -4y - 3x \\ 3x + 8 &= 4y \end{aligned}$$



Solve each system by elimination.

$$21) \begin{aligned} -2x + 10y &= -28 \\ -5x - 20y &= 20 \end{aligned}$$

$$22) \begin{aligned} -18x + 9y &= -9 \\ -9x + 5y &= -8 \end{aligned}$$

Simplify. Your answer should contain only positive exponents.

$$23) v^3 \cdot 2uv^3$$

$$24) 2x^2y^4 \cdot x^2y^3$$

$$25) 2x^2 \cdot 2yx^2$$

$$26) 4x^3y^3 \cdot 4x$$

$$27) 3x^3 \cdot 4xy$$