SRHS - Math 1 - #6.0 Name_____

Solve each equation.

1) $5k - 8 = 22$

{6}

2) $x + 4 = 3x - 10$

{7}

3) $-16 = 4(n + 6)$

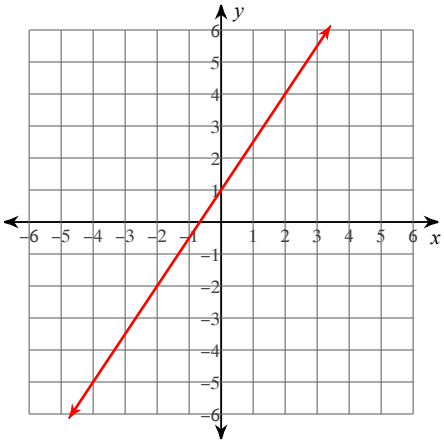
{−10}

4) $\frac{x + 4}{6} = 2$

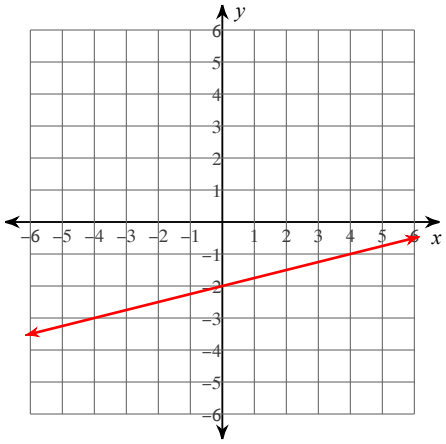
{8}

Sketch the graph of each line.

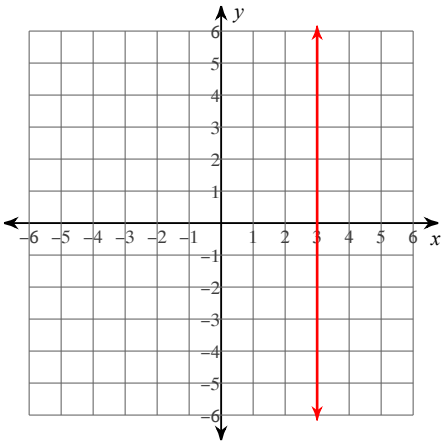
5) $y = \frac{3}{2}x + 1$



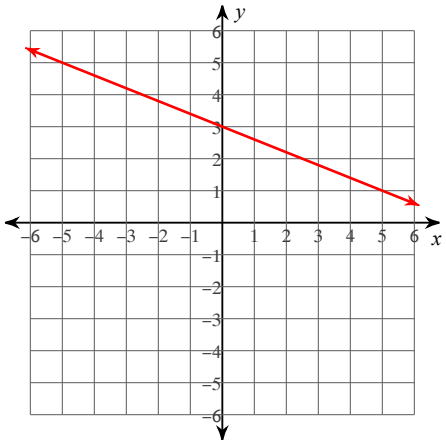
6) $y = \frac{1}{4}x - 2$



7) $x = 3$

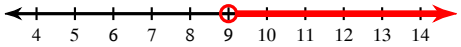


8) $y = -\frac{2}{5}x + 3$



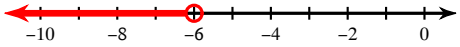
Solve each inequality and graph its solution.

9) $4(p-2) > 28$



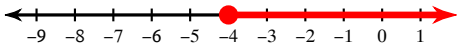
$p > 9$

10) $\frac{k}{6} + 3 < 2$



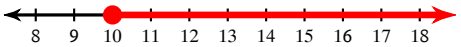
$k < -6$

11) $4m + 3 \geq -13$



$m \geq -4$

12) $1 - 5k \leq -49$



$k \geq 10$

Write the point-slope form of the equation of the line through the given points.

13) through: $(3, -4)$ and $(2, 4)$

$y + 4 = -8(x - 3)$ or $y - 4 = -8(x - 2)$

14) through: $(-2, 4)$ and $(-5, 0)$

$y - 4 = \frac{4}{3}(x + 2)$ or $y + 0 = \frac{4}{3}(x + 5)$

Write the slope-intercept form of the equation of the line through the given points.

15) through: $(4, 0)$ and $(0, 3)$

$y = -\frac{3}{4}x + 3$

16) through: $(0, 2)$ and $(-3, -5)$

$y = \frac{7}{3}x + 2$

Solve each system by elimination.

17) $-5x - 5y = 5$
$5x + 6y = -7$

$(1, -2)$

18) $6x - 6y = -18$
$-4x + 6y = 10$

$(-4, -1)$

Solve each system by substitution.

19) $-8x + 8y = -16$
$y = 5x - 22$

$(5, 3)$

20) $3x - 4y = -20$
$x - y = -4$

$(4, 8)$