

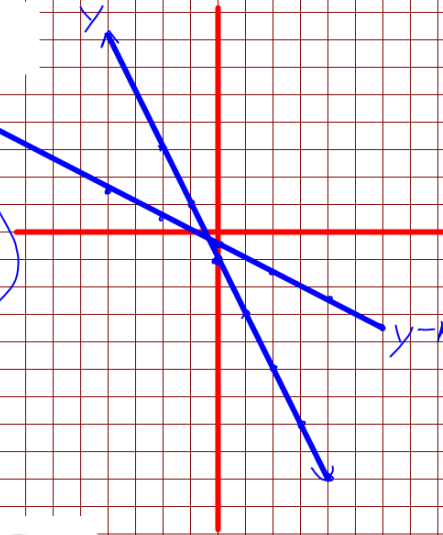
21.  $y = -2x - 1$

$$x = -2y - 1$$

$$x + 1 = -2y$$

$$\frac{x+1}{-2} = y^{-1}$$

$$-\frac{1}{2}x - \frac{1}{2} = y^{-1}$$



33.  $g(x) = 2x + 8$

$$f(x) = \frac{1}{2}x - 4$$

$$\begin{aligned} [g \circ f](x) &= g\left(\frac{1}{2}x - 4\right) = 2\left(\frac{1}{2}x - 4\right) + 8 \\ &= x - 8 + 8 \\ &= x \end{aligned}$$

$$\begin{aligned} [f \circ g](x) &= f(2x + 8) = \frac{1}{2}(2x + 8) - 4 \\ &= x + 4 - 4 \\ &= x \end{aligned}$$

(Yes)

$$y = \frac{2(x-12) + 10}{4} = \frac{2x - 24 + 10}{4} = \frac{2x - 14}{4}$$

$$y = \sqrt{3x + 4}$$

$$3x + 4 \geq 0$$

$$3x \geq -4$$

Domain  $x \geq -\frac{4}{3}$

Range:  $y \geq 0$

x-int:  $-\frac{4}{3}$

y-int: 2

| x              | y                       |
|----------------|-------------------------|
| $-\frac{4}{3}$ | 0                       |
| -1             | 1                       |
| 0              | 2                       |
| 1              | $\sqrt{7} \approx 2.6$  |
| 10             | $\sqrt{34} \approx 5.8$ |

