p. 194 (35) $\frac{1}{12}(48+24b)=2(17-4b)$

$4+2b=34+-8b$

$-4+8b \quad -4 \quad +8b$

$\frac{10b}{10}=\frac{30}{10}$

$b=3$

p. 195 (49) $\frac{n+8}{5n-2}=\frac{3}{8}$

$(n+8)\cdot 8=(5n-2)\cdot 3$

$8n+64=15n+-6$

$\frac{-7n}{-7}=\frac{-70}{-7}$

$n=10$

p. 273 (16) slope (-2,0) and (4,9)

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{9-0}{4+2} = \frac{9}{6} = \frac{3}{2}$$

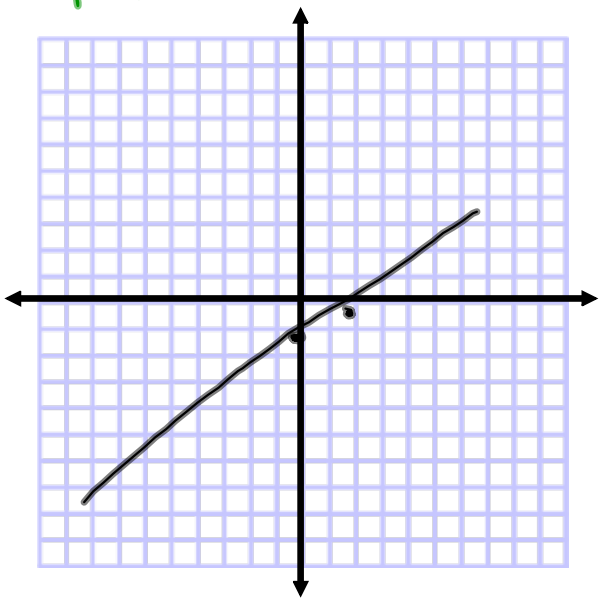
p. 273 (19) graph (slope/intercept)

$3x - 6y = 9$

$y = mx + b$

$$\frac{-6y}{-6} = \frac{-3x + 9}{-6}$$

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



p. 346 (10) equation for $(8,-4)$ $m=-3$

$$y=mx+b$$

$$y=-3x+b$$

$$-4=-3(8)+b$$

$$-4=-24+b$$

$$20=b$$

$$\boxed{y=-3x+20}$$

p. 346 (12) equation for (9,-2) (-3,2)

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{2+2}{-3-9} = \frac{4}{-12} = -\frac{1}{3}$$

$y = mx + b$

$-2 = -\frac{1}{3}(9) + b$

$-2 = -3 + b$

$b = 1$

$$\boxed{y = -\frac{1}{3}x + 1}$$

p. 347 (19) equation of $\parallel$ & $\perp$ $(2, -3)$ $y = -2x - 3$

$y = -2x + b$

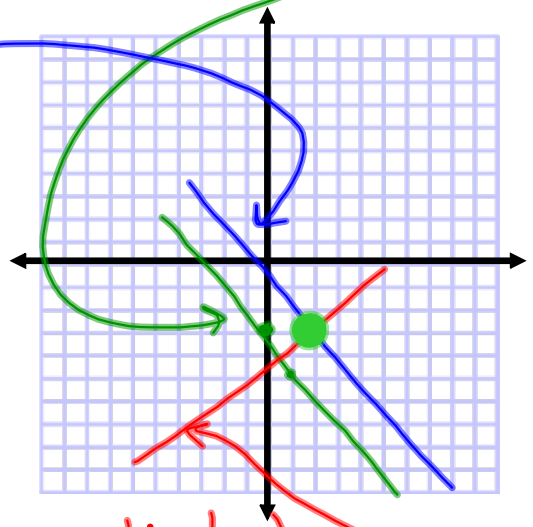
$-3 = -2(2) + b$

$-3 = -4 + b$

$1 = b$

$\boxed{y = -2x + 1}$

$\frac{-2}{1} \Rightarrow +\frac{1}{2}$



$\frac{a}{b} \Rightarrow -\frac{b}{a}$ (perpendicular)

$y = \frac{1}{2}x + b$

$-3 = \frac{1}{2}(2) + b$

$-3 = 1 + b$

$-4 = b$

$\boxed{y = \frac{1}{2}x + -4}$

p. 417 (21) $-3 < -3x + 8 < 11$

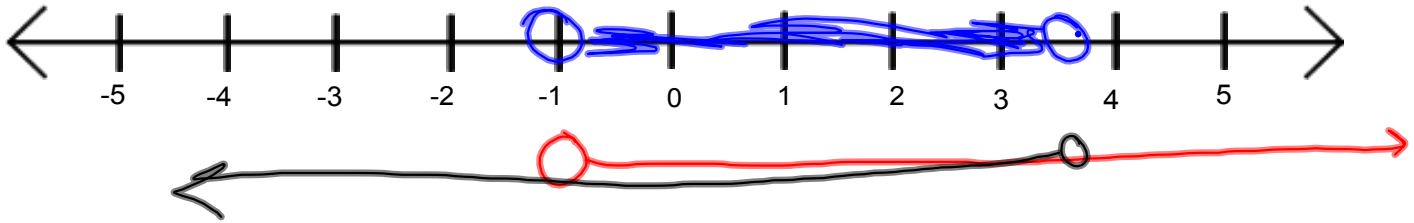
$-8 \quad -8 \quad -8$

$\frac{-11}{-3} < \frac{-3x}{-3} < \frac{3}{-3}$

$\frac{11}{3} > x > -1$

$-1 < x < \frac{11}{3}$

$\frac{11}{3} = 3\frac{2}{3}$

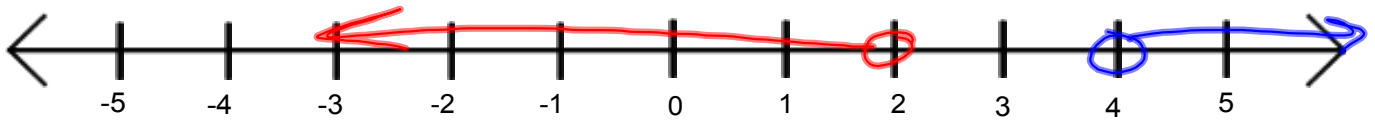


p. 417 (22)

$9s - 6 < 12$ or $3s + 1 > 13$

$9s < 18$ $\quad$ $3s > 12$

$s < 2$ $\quad$ $s > 4$



p. 418 (43) graph $3x-2y<12$

$3x-2y<12$

$\frac{-2y}{-2} < \frac{-3x+12}{-2}$

$y > \frac{3}{2}x - 6$

$0 > \frac{3}{2}(0) - 6$

$0 > -6$ yes