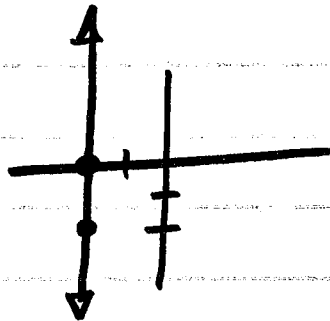


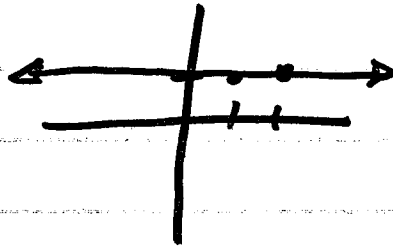
1.1

23



$$x = -2$$

22



$$y = 1$$

40 $2x + 3y = 6$

$$cd \left(\frac{x}{c} + \frac{y}{d} \right) = 1 \cdot cd \quad \frac{x}{c} + \frac{y}{d} = 1$$

$$dx + cy = cd$$

$$x = c \quad y = d$$

$$\boxed{x = c}$$

$$\boxed{y = d}$$

41 $x + y = 1$

$$y = -x + 1$$

$$m = -1$$

$$2x + ky = 3$$

$$-2x$$

$$\frac{ky}{k} = \frac{-2x + 3}{k} \quad \frac{ky}{k} = \frac{-2x + 3}{k}$$

$$y = \left(\frac{-2}{k} \right) x + \frac{3}{k}$$

$$k \cdot \left(\frac{-2}{k} \right) = -1 \cdot k$$

$$-2 = -k$$

$$\boxed{2 = k \text{ parallel}}$$

$$k \cdot \left(\frac{-2}{k} \right) = 1 \cdot k$$

$$\boxed{-2 = k \text{ perpendicular}}$$

1.1

35 | $m = \frac{9-2}{3-1} = \frac{7}{2} \checkmark$

37 | $\frac{y-3}{4-3} = \frac{7}{2}$

(1,2)

$$\begin{aligned} y &= mx + b \\ 2 &= \frac{7}{2}(1) + b \\ 2 &= \frac{7}{2} + b \\ -\frac{7}{2} & \quad -\frac{7}{2} \\ \hline -\frac{1}{2} &= b \checkmark \end{aligned}$$

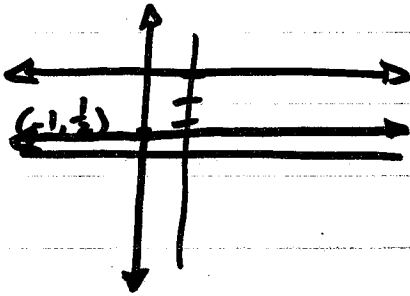
← $\frac{y-3}{4-3} = \frac{7}{2} \cdot 1$

$$\begin{aligned} y-3 &= -4 \\ +3 & \quad +3 \end{aligned}$$

$$\boxed{y = -1}$$

$$y = \frac{7}{2}x - \frac{1}{2}$$

39 |



$$\begin{aligned} // \quad y &= \frac{1}{2} \\ \perp \quad x &= -1 \end{aligned}$$