

$$\textcircled{1} \quad 3x - 7y + 8 = 0$$

Slope: $-7y = -3x - 8$

$$y = \frac{3}{7}x + \frac{8}{7}$$

y-int: $= \frac{8}{7}$

slope $= \frac{3}{7}$

x-int: $3x - 7(0) + 8 = 0$

$$3x + 8 = 0$$

$$3x = -8$$

$$x = \underline{\underline{-\frac{8}{3}}}$$

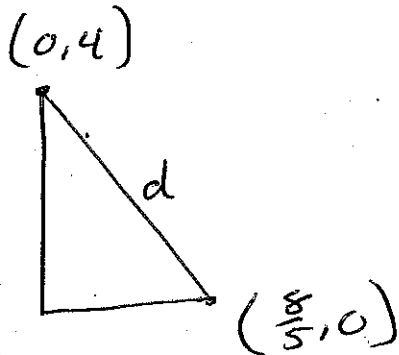
$\textcircled{2}$ Find intercepts:

x-int: $5x - 8 = 0$

$$x = \frac{8}{5}$$

y-int: $2y - 8 = 0$

$$y = 4$$



rise: 4

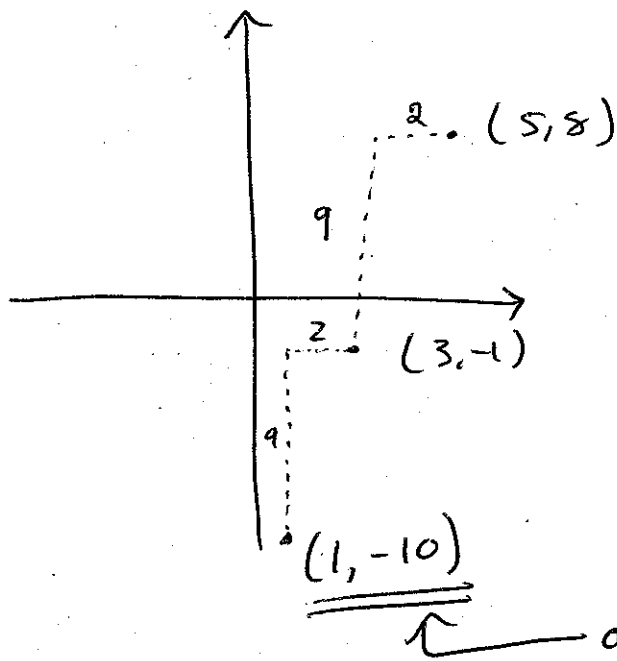
run: $\frac{8}{5}$

$$d^2 = 4^2 + \left(\frac{8}{5}\right)^2$$

$$= 16 + \frac{64}{25} = \frac{464}{25}$$

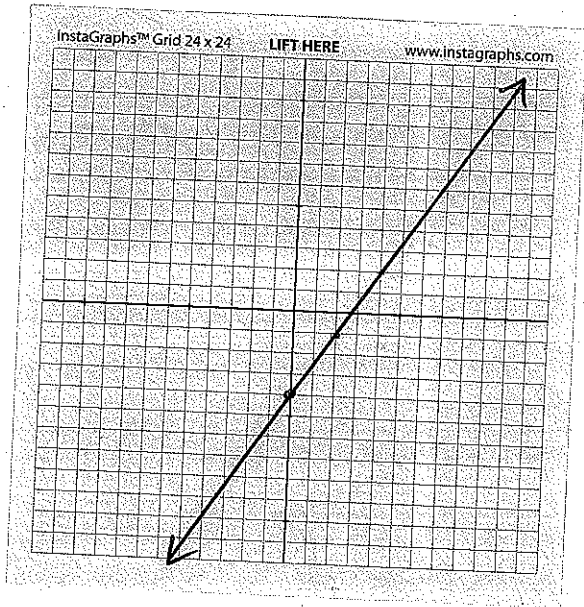
$$d = \frac{4\sqrt{29}}{5}$$

3



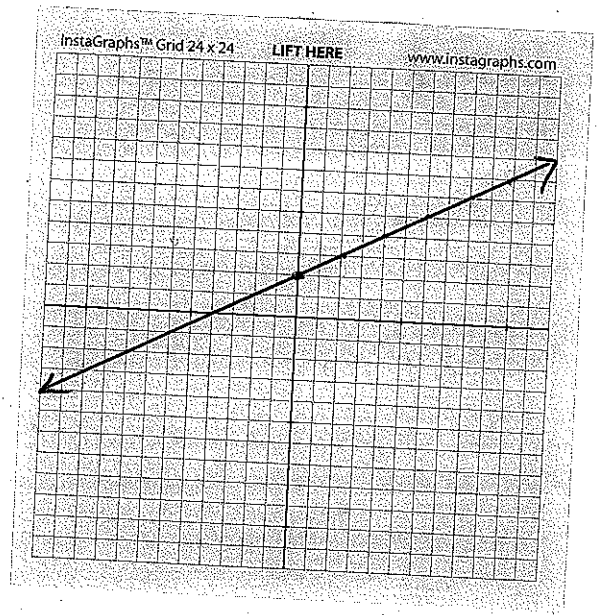
4

$$y = \frac{3}{2}x - 4$$



5) $-6y = -3x - 12$

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



⑥ $m=3$ $(2,4)$

$$y - 4 = 3(x - 2)$$

$$y - 4 = 3x - 6$$

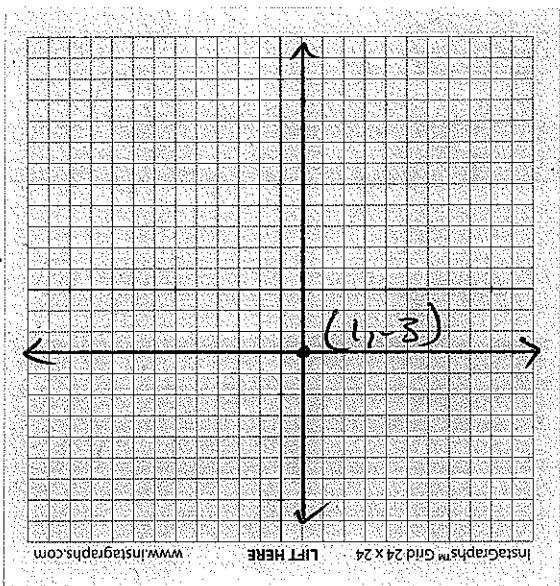
$$y = 3x - 2$$

↑
y-int.

New line: slope could be anything.

$$\underline{\underline{y = -x - 2}}$$

⑦



$$\textcircled{8} \text{ slope} = \frac{7-5}{-6+2} = \frac{2}{-4} = -\frac{1}{2}$$

$$\perp \text{ slope} = 2$$

$$MP = (-4, 6)$$

equation

$$y - 6 = 2(x + 4)$$

$$y - 6 = 2x + 8$$

$$\boxed{0 = 2x - y + 14}$$

