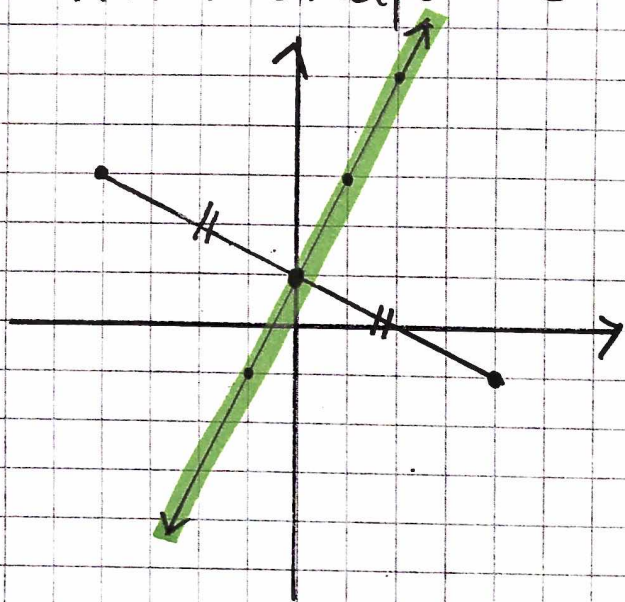


- ④ write eqn of $\perp$ bisector of segment with endpoints $(-4, 3)$ and $(4, -1)$



$$\begin{aligned} \textcircled{1} \text{ mdpt } & \left(\frac{-4+4}{2}, \frac{3+(-1)}{2} \right) \\ & = \left(\frac{0}{2}, \frac{2}{2} \right) \\ & = (0, 1) \end{aligned}$$

- ② slope of orig. line

$$m = \frac{-1-3}{4-(-4)} = \frac{-4}{8} = -\frac{1}{2}$$

- ③ $\perp$ slope

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

$$-m = -2$$

$$m = 2$$

- ④ eqn. of $\perp$ bisector

$$y - y_1 = m(x - x_1)$$

$$y - 1 = 2(x - 0)$$

$$y - 1 = 2x$$

$$y = 2x + 1$$