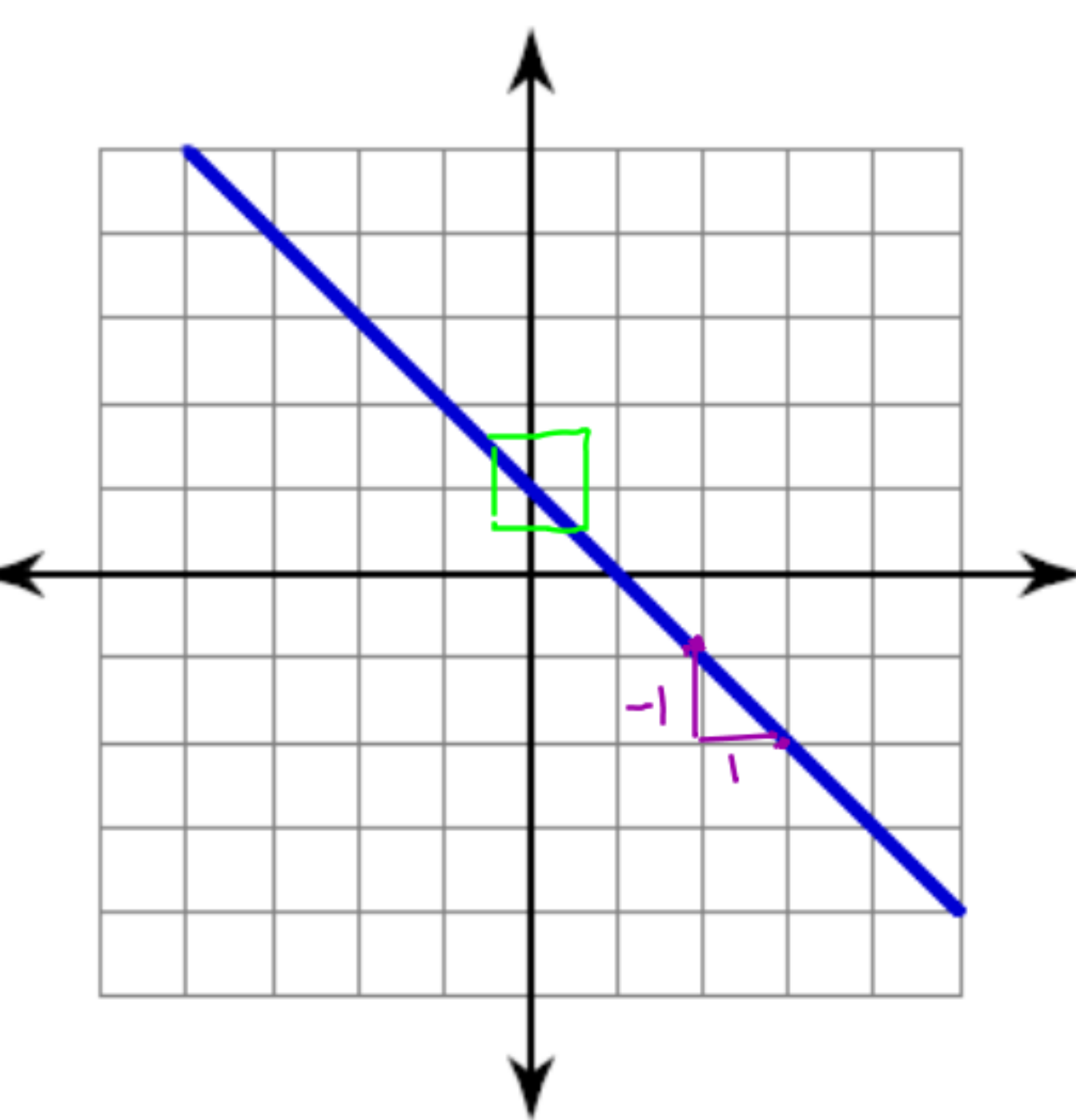


Mathematics 10D

1.0b – From Graph to Equation

Mr. D. Hagen



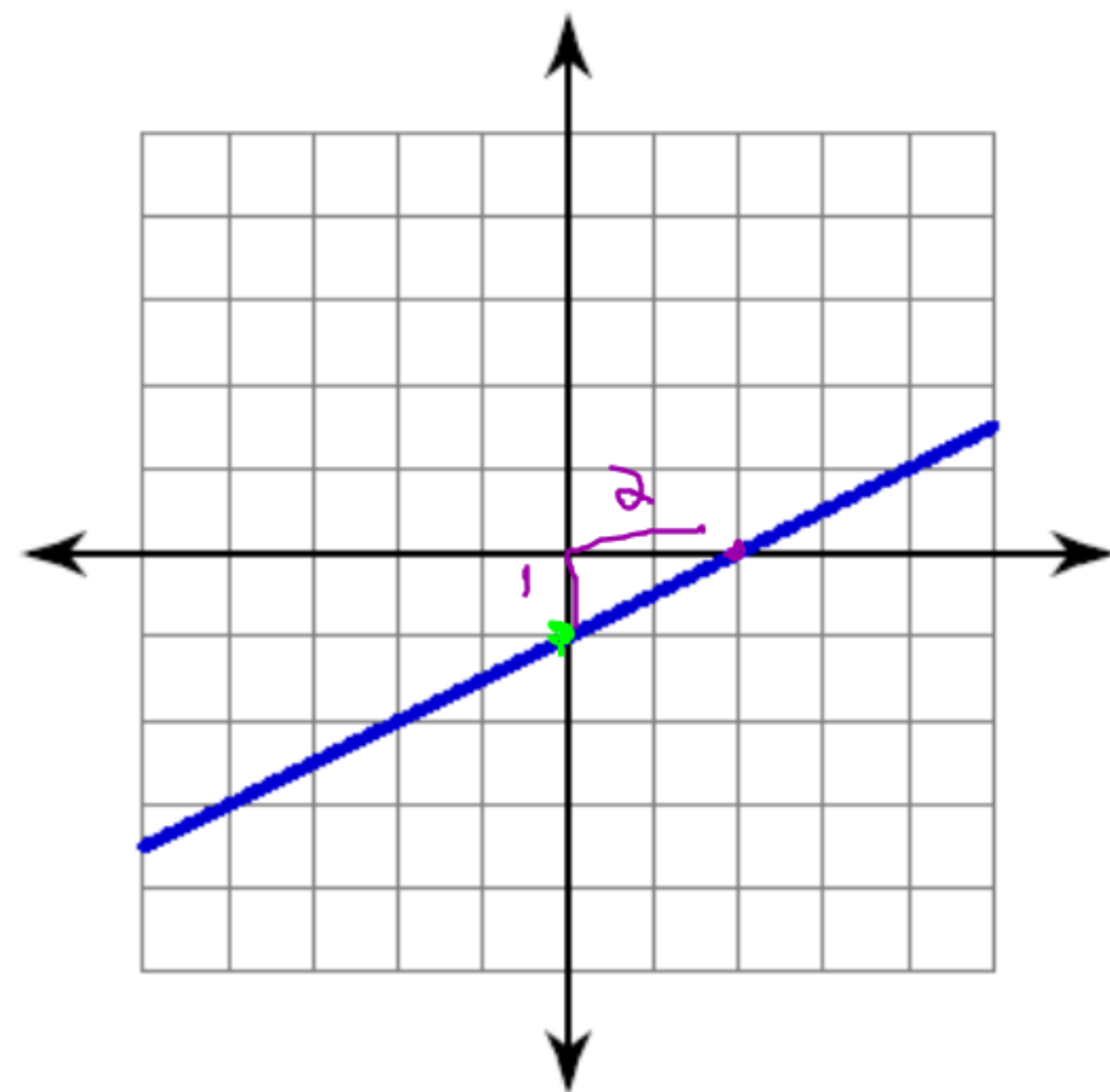
$$y = mx + b$$

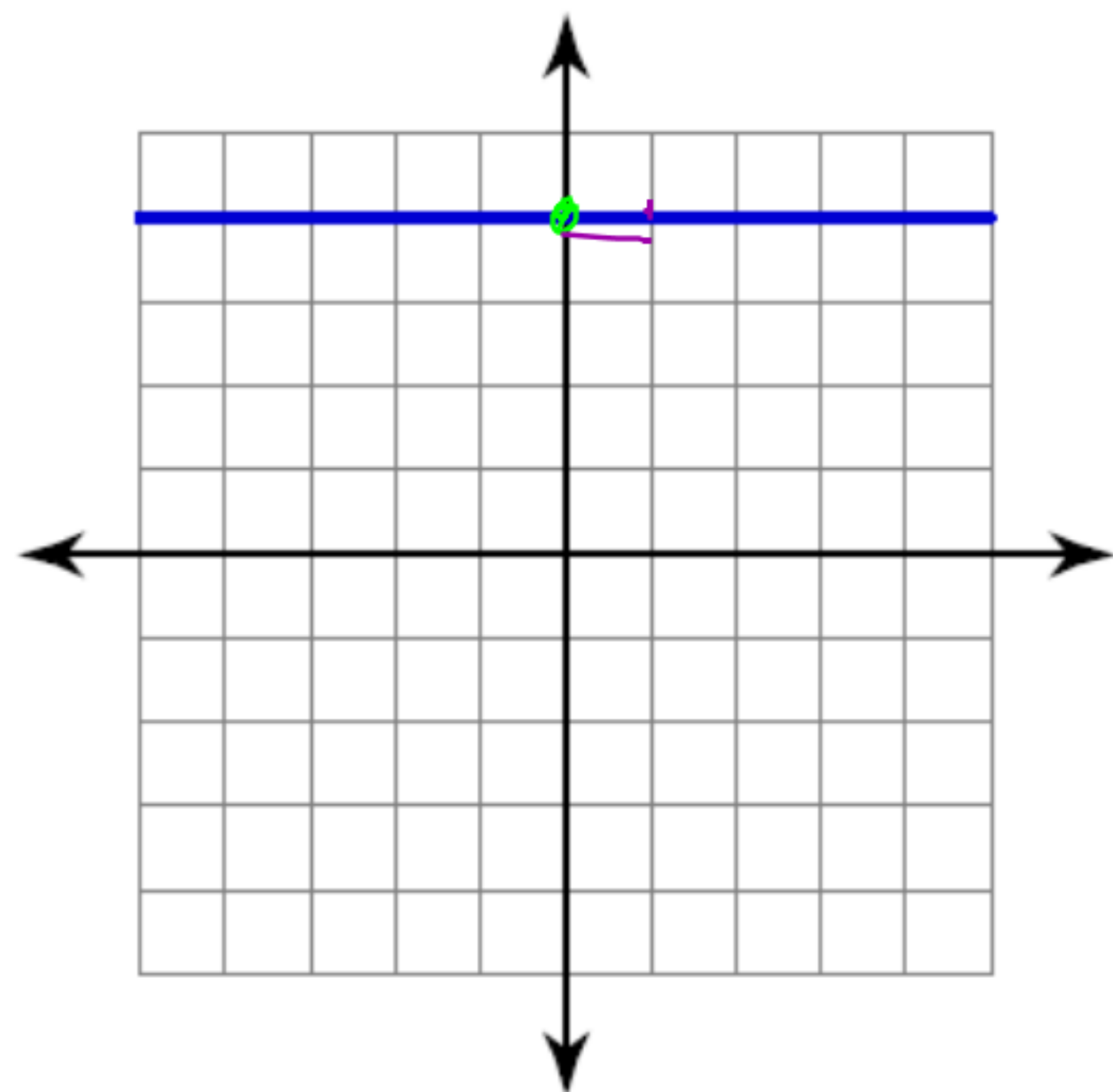
$$y = -1x + 1$$

$$y = -x + 1$$

$$y = mx + b$$

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





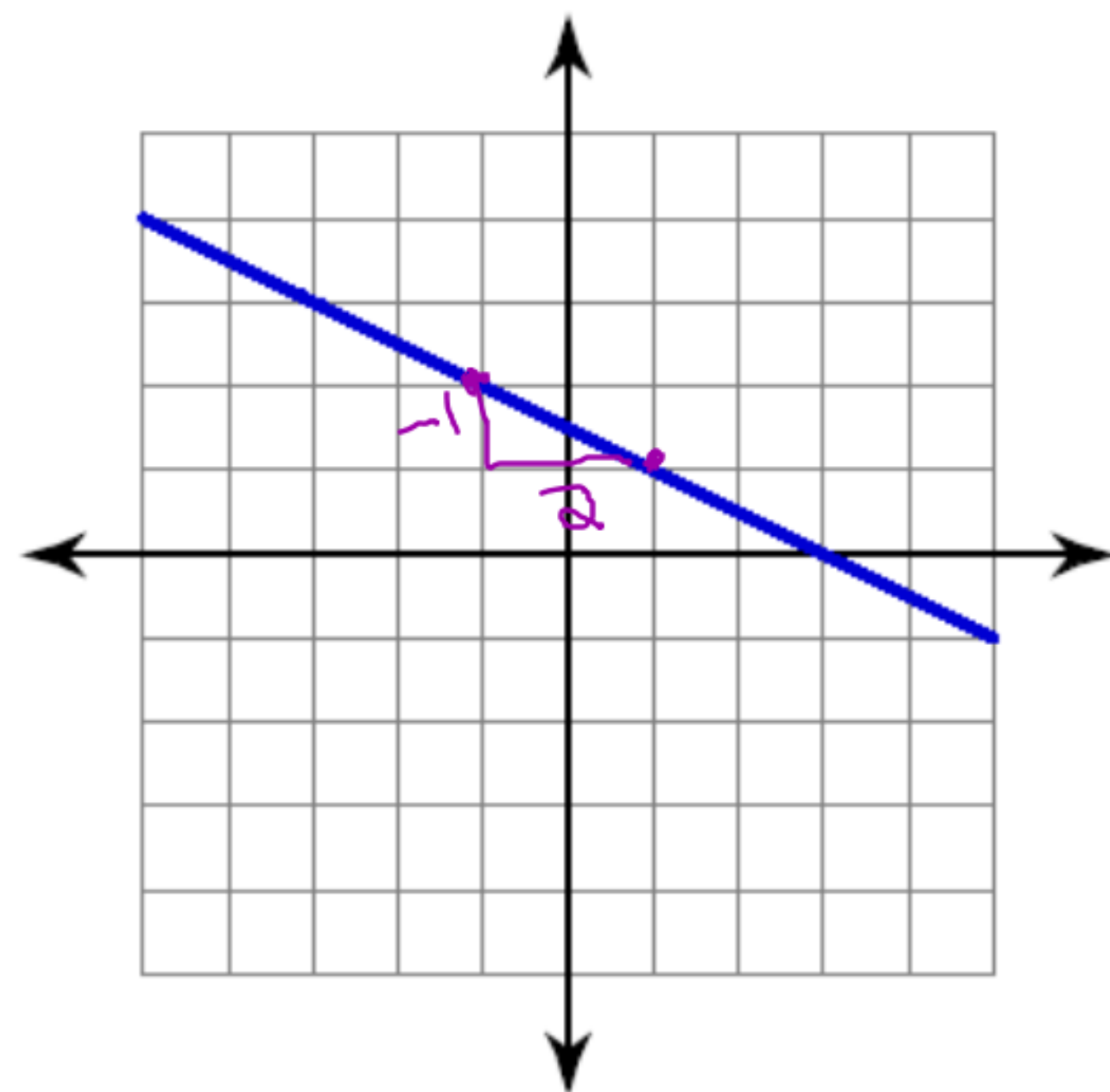
$$y = mx + b$$

$$y = \underline{0} x + 4$$

$$y = \therefore 4$$

$$y = mx + b$$

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



$$(\overset{x}{-9}, \overset{y}{-13}), (\overset{x}{-10}, \overset{y}{-19})$$

$$y = mx + b$$

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{-19 - (-13)}{-10 - (-9)} = \frac{-6}{-1} = 6$$

$$y = 6x + b$$

$$-19 = 6(-10) + b$$

$$\overset{+60}{-19} = \overset{+60}{-60} + b$$

$$41 = b$$

$$\therefore y = 6x + 41$$

$$(-2, 14), (13, 8)$$

$$m = \frac{14 - 8}{-2 - 13} = \frac{6}{-15} = -\frac{2}{5}$$

$$y = -\frac{2}{5}x + b$$

$$14 = -\frac{2}{5} \left(-\frac{2}{1} \right) + b$$

$$\frac{14}{1} = \frac{4}{5} + b$$

$$\frac{70}{5} - \frac{4}{5} = b$$

$$\frac{66}{5} = b$$

$$\therefore y = -\frac{2}{5}x + \frac{66}{5}$$