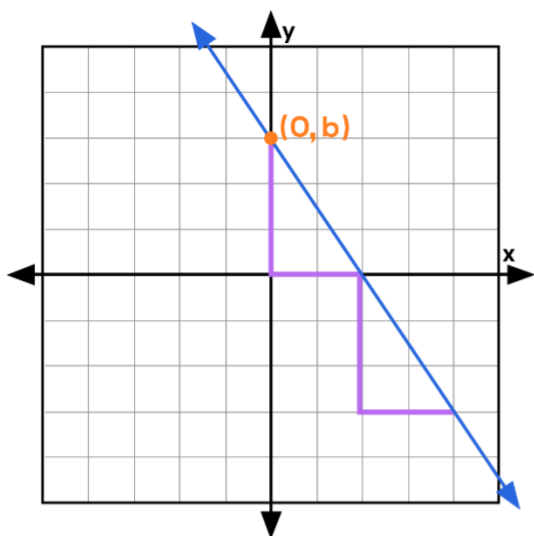


GUIDED NOTES (MODEL NOTES)

Slope-Intercept Form: $y = mx + b$



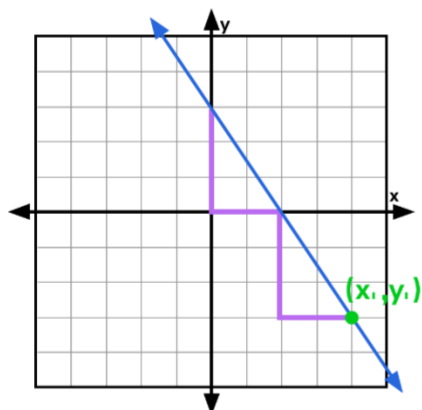
$b = y$ - intercept;
the point where
the line crosses
the y - axis

$$m = \text{Slope} = \frac{\text{rise}}{\text{run}}$$

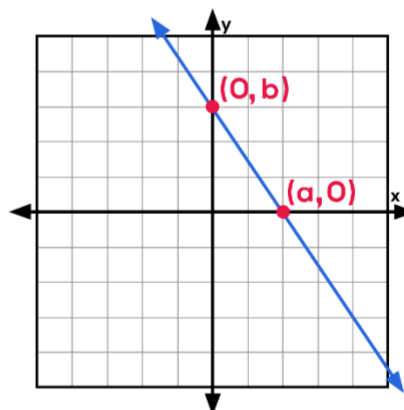
$$= \frac{\Delta Y}{\Delta X} = \frac{y_2 - y_1}{x_2 - x_1}$$



Point - Slope Form: $y - y_1 = m(x - x_1)$



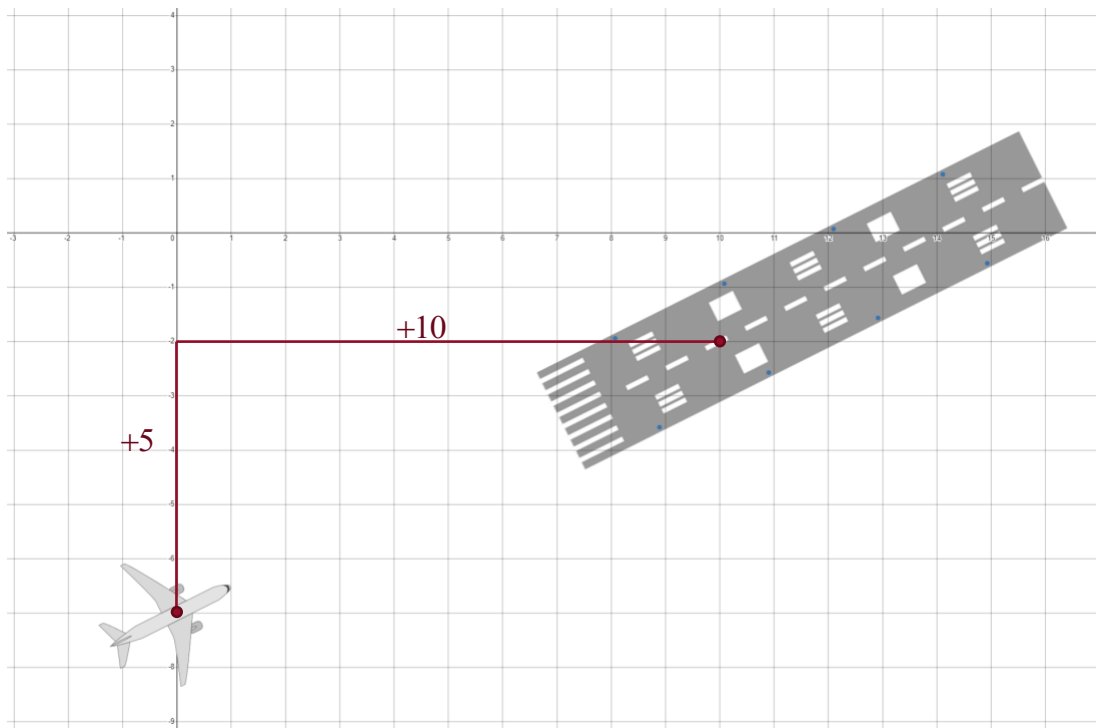
Standard Form: $Ax + By = C$, where A, B, C are integers



$m = \text{slope}$
 $(x_1, y_1) = \text{any point}$
on the line

most user-friendly
form when
working with x -
and y - intercepts

Screen 9

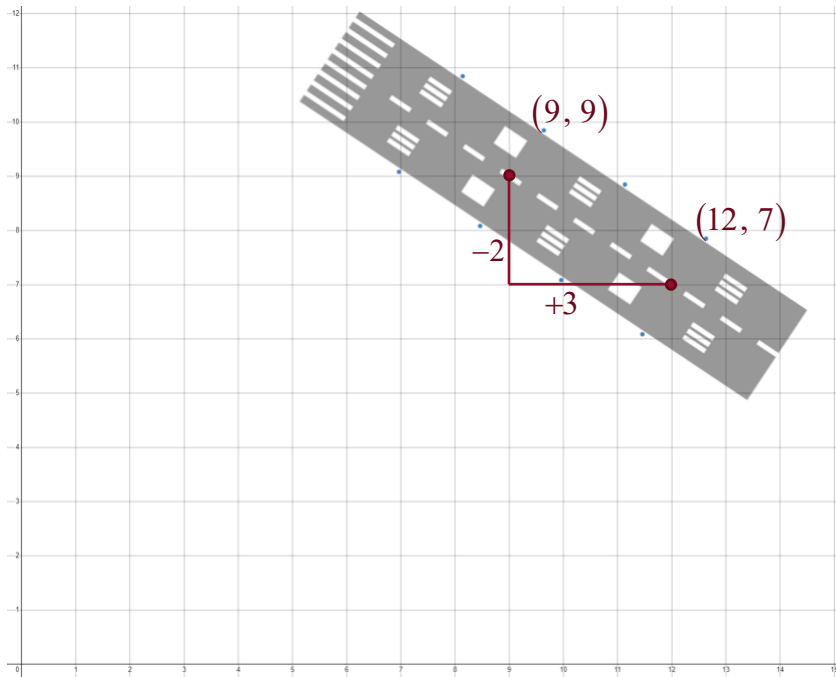


$$m = \frac{+5}{+10} = \frac{1}{2}$$

$$b = -7$$

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

Screen 10



$$m = \frac{-2}{+3} = -\frac{2}{3}$$

$$(x_1, y_1) = (12, 7)$$

$$y - 7 = -\frac{2}{3}(x - 12)$$

$$y - 7 = -\frac{2}{3}x + 8$$

$$y = -\frac{2}{3}x + 15$$