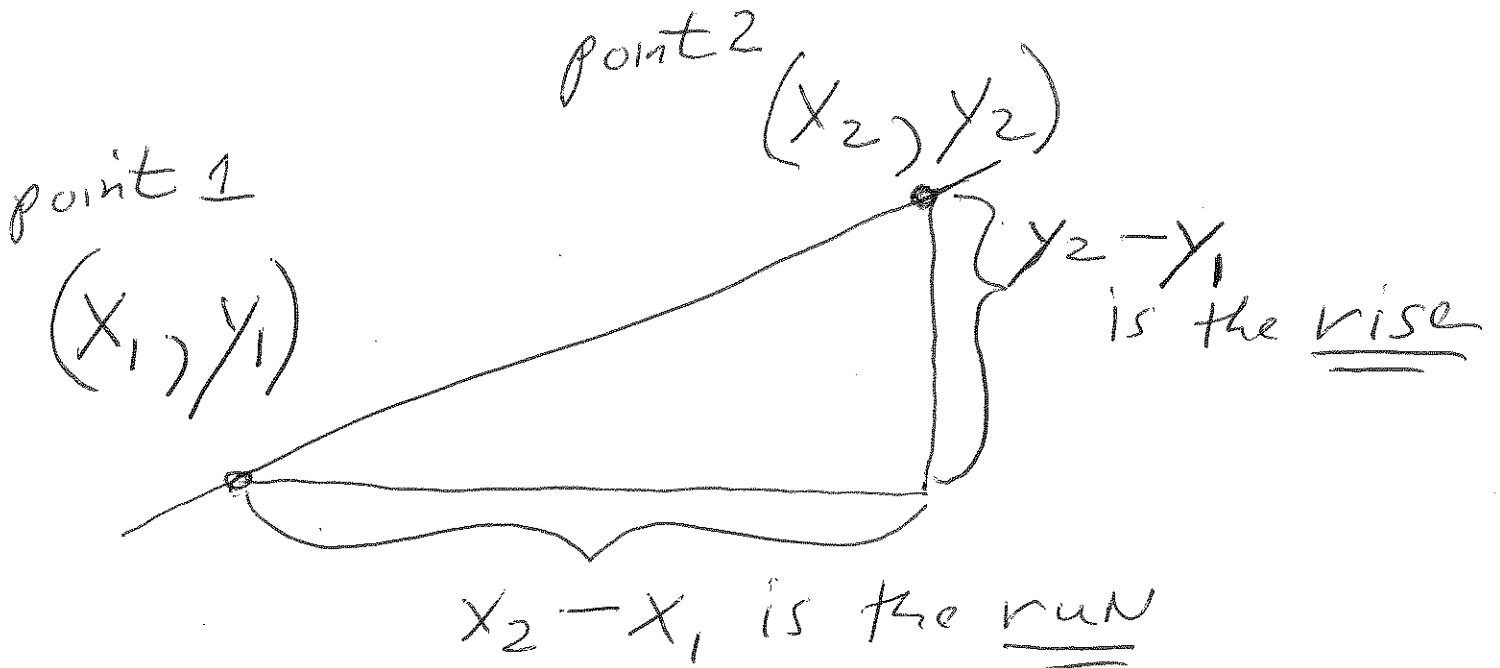
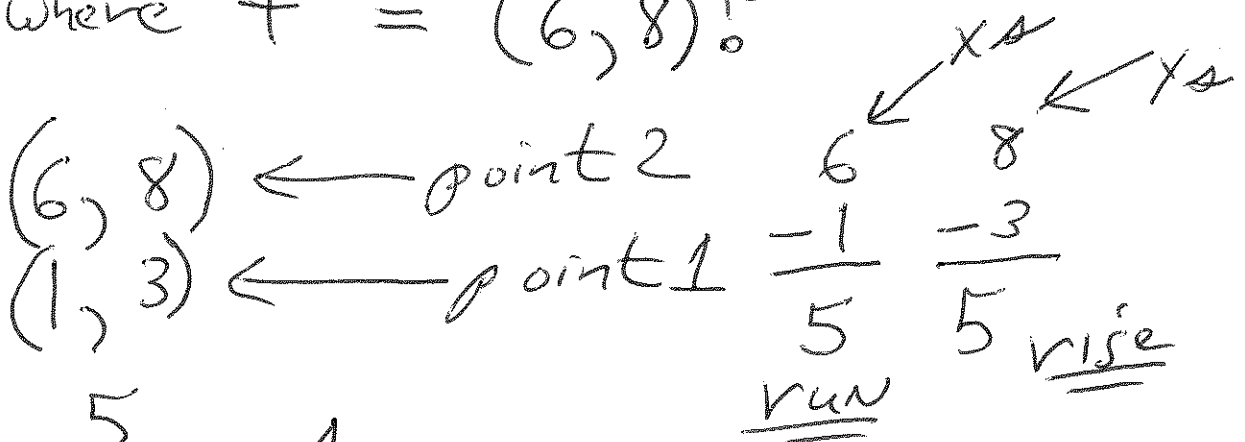


- ① What is the slope of the line that goes through points a and c?
- ② What is the slope of the line that goes through points b and d?

$$m = \frac{\text{rise}}{\text{run}} = \frac{\text{change in } y}{\text{change in } x}$$



③ What is the slope of the line that connects points e and f, where e = (1, 3) and where f = (6, 8)?



$$\frac{\text{rise}}{\text{run}} = \frac{5}{5} = 1$$

The slope  $m$  is 1,  $m = 1$

④ Place points  $e$  and  $f$  on the graph above. Draw the line that connects  $e$  and  $f$ . Where does it cross the  $y$  axis?

This then would be a good guess for the  $y$  intercept.

$$y = mx + b$$

When  $x = 0$ , we have

$$y = m \cdot 0 + b \quad \text{or} \quad y = 0 + b$$
$$y = b$$

Coordinates  $(0, b)$  is where the  $y = mx + b$  intersects or intercepts the vertical  $y$ -axis.

⑤  $y = -0.7x + 90$

- i) What is the intercept?  $P$  ( $y$  intercept)
- ii) What is  $y$  when  $x$  is equal to 10?
- iii) What is  $y$  when  $x$  is equal to 30?
- iv) What is the slope?