

College Algebra

MAT 121-G13

osteogenesis  
imperfecta

HARRY Steve Mills

If college algebra not required?

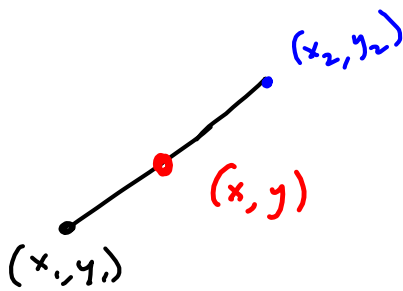
Why do it?

Course Website:

S 1.1 & 1.2 videos may be rough.

Lines :

$$y = mx + b$$



$$m = \frac{\text{Rise}}{\text{Run}} = \frac{\Delta \text{Vertical}}{\Delta \text{Horizontal}} = \frac{\Delta y}{\Delta x}$$

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \text{SLOPE}$$

$$\frac{y_2 - y_1}{x_2 - x_1} = m = \frac{y - y_1}{x - x_1} = m$$

$$\Rightarrow \left( \frac{y - y_1}{x - x_1} \right) (x - x_1) = m(x - x_1)$$



Simplify?

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

$$+ y_1 =$$

$$+ y_1$$

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

Find eq<sup>n</sup> of line  
 Then (7, -3) with  $m = -17$

POINT-SLOPE FORM OF LINE.

New!

$$y = -17(x - 7) - 3$$

Stop!

Old way

$$-3 = -17(7) + b \quad \text{Solve for } b:$$

$$-3 = -114 + b$$

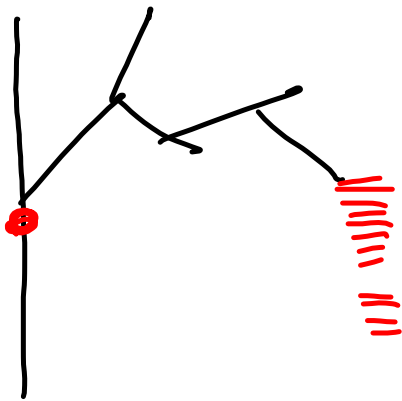
$$111 = b$$

$$y = -17x + 111$$

$$y = -17x + 114 - 3$$

$$= -17x + 111$$

$$\begin{array}{r} -17 \\ -7 \\ \hline 114 \end{array}$$



Homework: Monday. Section 1.1 and 1.2

College Algebra

Dugopolski

Green book.