



D should be about here $(c, -7)$

$$22. m_{BC} = \frac{6-2}{9-2} = \frac{4}{7} = \frac{\Delta y}{\Delta x}$$

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

use this with $m = \frac{4}{7}$ and

$$\text{pt. } \textcircled{1} = (c, -7)$$

$$\text{pt. } \textcircled{2} = (9, -3)$$

$$\frac{4}{7} = \frac{-3 - (-7)}{9 - c}$$

$$\frac{4}{7} = \frac{4}{(9-c)}$$

$$\therefore 7 = 9 - c$$

$$c = 9 - 7$$

$$\boxed{c = -2}$$

6.3 Exploring the Graphs of Linear Functions

Go to pg. 355 and complete **Construct Understanding** with a partner. Use the tables provided to record your results → DESMOS

| Equation | m | sketch of the graph | slope | x-int. | y-int. |
|------------------------------|---------------|---------------------|---------------|--------|--------|
| $y = mx + b$ $y = 1x + 6$ | 1 | | 1 | -6 | 6 |
| $y = \frac{4}{7}x + 6$ | $\frac{4}{7}$ | | $\frac{4}{7}$ | -10.5 | 6 |
| | 0 | | | | |
| | - | | | | |
| | | | | | |
| | - | | | | |

tell me what happens when

$$m > 0$$

$$m = 0$$

$$m < 0$$

| Equation | b | sketch of the graph | slope | x-int. | y-int. |
|--------------|---|---------------------|-------|--------|--------|
| $y = 2x + b$ | | | | | |
| $y = 2x + 1$ | 1 | | 2 | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Pg. 356 # 1-7

answer D. and E.

Quiz Monday: 6.1 - 6.3