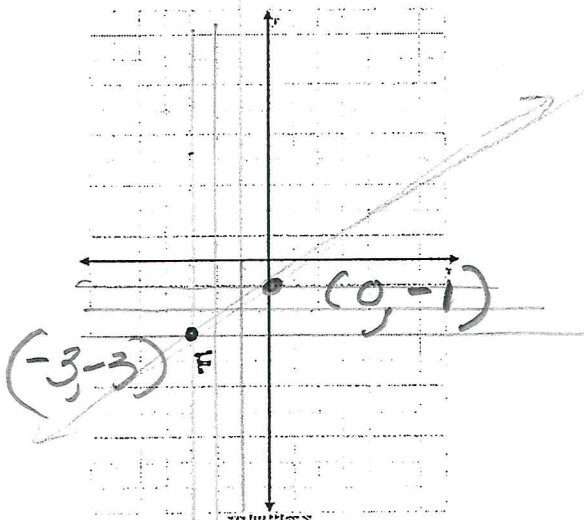


3. Using the diagram in number 2, Complete the proportion below to represent equal line segments.

$$\frac{\text{rise}}{\text{run}} \frac{BD}{AB} = \frac{FC}{AC}$$

4. Point F is plotted on the coordinate plane.



$(-3, -3)$

$$\frac{y - y_1}{x - x_1}$$

$$\frac{-3 + 1}{-3 - 0} = \frac{2}{3}$$

Erin wrote the equation of a line through point F as $y = mx - 1$.
What is the value of m in Erin's equation?

a. -1

b. $\frac{3}{2}$

c. $\frac{2}{3}$

d. $-\frac{2}{3}$

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

5. The table below shows values for points on the graph of a function.

Point	P	Q	R	S
x	5	4	3	1
y	3	1	-2	-4

$\frac{-1}{-1} = 1$
 $\frac{-1}{-2} = \frac{1}{2}$
 $\frac{-2}{-2} = 1$
 slope constant
 change y
 change x

Can this function be represented by a straight line? Explain.

No, not linear because the slope is not constant. $-\frac{2}{-1} \neq -\frac{3}{-1} \neq -\frac{2}{-2}$