

slope AB = -10

slope CD = 10

$$\left(\frac{b+B}{2} \right) h$$

$$\textcircled{1} 54 - 36 = 18 \div 2 = 9$$

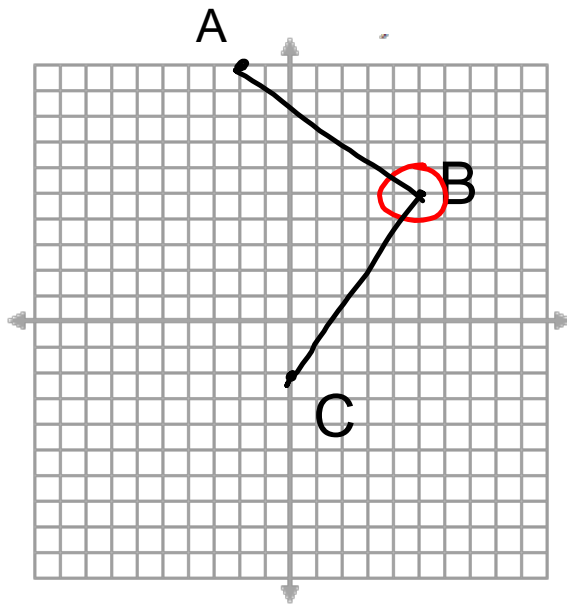
$$-10 \quad (9, 0)$$

$$y = ax + b$$

$$0 = -10(9) + b$$

$$90 = b$$

Proof Using Analytic Geometry



Do points A, B, and C form a right angle triangle? And if so, at what point is the right angle?

$$A = (-2, 10)$$

$$B = (5, 5)$$

$$C = (0, -2)$$

right angle \rightarrow perp

perp \rightarrow negative reciprocals

$$AB = \frac{10 - 5}{-2 - 5} = \frac{5}{-7} = \frac{5 - 10}{5 - (-2)}$$

$$BC = \frac{5 - (-2)}{5 - 0} = \frac{7}{5}$$

Try p.98, #16

Before you go...

1. Find the slope and intercepts for the pair of points (4, 2) and (2, -4). Find the equation in function form.

2. Rearrange the equation $y = \frac{5}{2}x - \frac{3}{2}$ into general form and symmetric form.

3. The symmetric form of an equation is:

$\frac{-4x}{3} + \frac{2y}{3} = 1$ Find the slopes and intercepts.