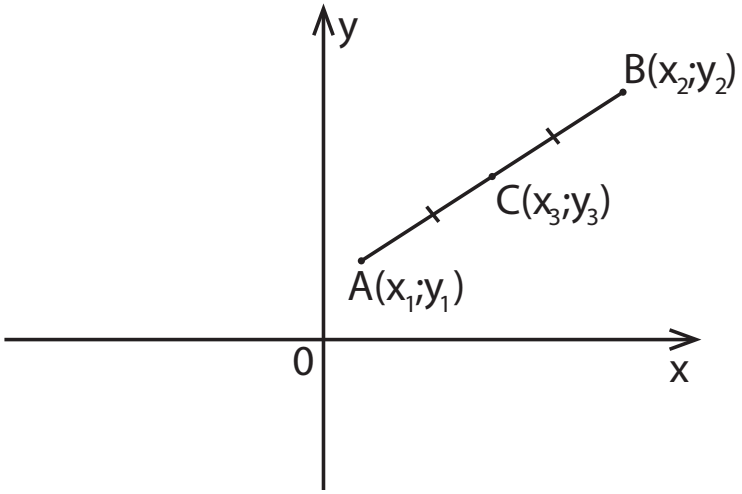
Теория:



$$AB = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$x_3 = \frac{x_1 + x_2}{2} \qquad y_3 = \frac{y_1 + y_2}{2}$$