

Section 1.1

The Distance Formula

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

Find the distance between the points (-2, 1) and (3, 4)

Use the Distance Formula to show that the points

(2, 1), (4, 0), and (5,7) are vertices of a right triangle.

The Midpoint Formula

a) Midpoint = $\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$

Find the midpoint of the line segment joining the points (-5, -3) and (9, 3)

Find x such that the distance between the points is 5

a) (2, -1), (x, 2)