

Section 2.8 Distance and Midpoint Formulas: Circles

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The Distance Formula

The distance, d , between the points (x_1, y_1) and (x_2, y_2) in the rectangular coordinate system is

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

To compute the distance between two points, find the square of the difference between the x -coordinates plus the square of the difference between the y -coordinates. The principal square root of this sum is the distance.

Example 1: Find the distance between each pair of points. If necessary, round answers to two decimal places.

