

Notes #9 ~ Sect. 11.3: The Distance Formula

Distance Formula:

The distance d between any two points (x_1, y_1) & (x_2, y_2)

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

Ex. 1: Find the distance between each pair of points. If necessary, round to the nearest tenth.

a) $(6, -9), (9, -4)$

b) $(-2, 1), (-5, 4)$

Ex. 2: A large building is on fire. Fire trucks from two different stations respond to the fire. One station is 1 mi east and 2 mi north of the fire. The other station is 2 mi west and 1 mi south of the fire. How far apart are the two fire stations?