

Distance Formula

L1S1

Example: Find the distance between the points (5, -1) and (3, 7).

$$\begin{aligned}\text{Distance} &= \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2} \\ &= \sqrt{(3 - 5)^2 + (7 + 1)^2} \\ &= \sqrt{(-2)^2 + (8)^2} = \sqrt{4 + 64} = \sqrt{68} \approx \mathbf{8.25 \text{ units}}\end{aligned}$$

Find the distance between the points. Round the answer to two decimal places.

1) (1, 3), (5, 7)

2) (-8, -9), (-4, -10)

3) (10, 6), (1, -4)

4) (3, 2), (8, 2)

5) (9, -3), (-1, 8)

6) (10, 0), (0, 4)

7) (-7, -2), (6, 9)

8) (-6, 5), (8, -3)

9) (-5, -6), (-9, -4)

10) (2, 0), (-7, 1)
