



Distance Formula

Name _____

Score _____

DF:04

Example : Find the distance between the points $(-3, 2)$ and $(5, -1)$.

$$\begin{aligned} \text{Distance} &= \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2} && x_1 = -3 ; x_2 = 5 ; y_1 = 2 ; y_2 = -1 \\ &= \sqrt{(5 + 3)^2 + (-1 - 2)^2} \\ &= \sqrt{64 + 9} = \sqrt{73} \approx \mathbf{8.54 \text{ units}} \end{aligned}$$

Find the distance between each pair of points. Round the answer to the nearest hundredth.

1) $(-2, -5)$ and $(-3, -1)$

2) $(0, -8)$ and $(-6, 0)$

3) $(7, 4)$ and $(1, 9)$

4) $(-3, 2)$ and $(11, -7)$

5) $(-4, -3)$ and $(8, -8)$

6) $(6, 9)$ and $(6, 1)$

7) $(1, 2)$ and $(-7, 0)$

8) $(-10, -8)$ and $(-4, -5)$



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Answer key

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Find the distance between each pair of points. Round the answer to the nearest hundredth.

1) $(-2, -5)$ and $(-3, -1)$

4.12 units

2) $(0, -8)$ and $(-6, 0)$

10 units

3) $(7, 4)$ and $(1, 9)$

7.81 units

4) $(-3, 2)$ and $(11, -7)$

16.64 units

5) $(-4, -3)$ and $(8, -8)$

13 units

6) $(6, 9)$ and $(6, 1)$

8 units

7) $(1, 2)$ and $(-7, 0)$

8.25 units

8) $(-10, -8)$ and $(-4, -5)$

6.71 units