

Name :

Class :



## Distance formula

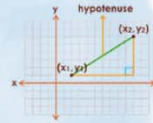
The distance formula in coordinate geometry is used to calculate the distance between two given points

Distance Formula

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

$(x_2 - x_1)$  = the change in x

$(y_2 - y_1)$  = the change in y



Find the distance between the points. For decimal points, round to the nearest hundredth

1)

$$(9\sqrt{3}, 3\sqrt{3}), (7\sqrt{3}, 2\sqrt{3})$$

$$\sqrt{15}$$

2)

$$(1, -2), (6, 8)$$

$$5\sqrt{5}$$

3)

$$(\sqrt{2}, 2\sqrt{2}), (4\sqrt{2}, 3\sqrt{2})$$

$$2\sqrt{5}$$

4)

$$(2.0, 2.9), (-1.8, -2.2)$$

$$6.36$$

5)

$$(3.4, -2.1), (-4.1, 1.7)$$

$$8.41$$

6)

$$(8\sqrt{3}, 2\sqrt{3}), (4\sqrt{3}, \sqrt{3})$$

$$\sqrt{51}$$

7)

$$(-7, 5), (2, 6)$$

$$\sqrt{82}$$

8)

$$(3.5, 4.9), (-4.7, 1.2)$$

$$9.00$$