

**Formula for the Day:**

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

Find the **distance** between the two given points. Leave your answers in simplified radical form.

1. (0, 3) and (-4, 6)

2. (-7, 3) and (0, 0)

3. (-3, -6) and (-2, 1)

4. (4, 7) and (-2, -5)

5. (12, 2) and (6, 10)

6. (5, 4) and (9, -2)

Use the distance formula to find the missing value of the coordinate pair.

7. Find  $x$  if the distance between (5, -1) and ( $x$ , 4) is 13 units.

8. Find  $y$  if the distance between (2, 6) & (8,  $y$ ) is 10 units.

9. Find  $x$  if the distance between (3, 2) and ( $x$ , -2) is 5 units.

10. Find  $y$  if the distance between (4, -2) & (-8,  $y$ ) is 13 units.