

## Solving Circle Equations

Name: \_\_\_\_\_

Solve each problem. Round to two decimal places.

1) y value of 2 and x value of 6.71. Find the radius.

1. \_\_\_\_\_

2) x value of 2 and y value of 2. Find the radius.

2. \_\_\_\_\_

3) x value of 5 and y value of 3. Find the radius.

3. \_\_\_\_\_

4) x value of 5 and radius of 6. Find the value of y.

4. \_\_\_\_\_

5) x value of 3 and y value of 2. Find the radius.

5. \_\_\_\_\_

6) x value of 4 and y value of 3. Find the radius.

6. \_\_\_\_\_

7) x value of 2 and y value of 2. Find the radius.

7. \_\_\_\_\_

8) x value of 2 and radius of 9. Find the value of y.

8. \_\_\_\_\_

9) x value of 3 and y value of 3. Find the radius.

9. \_\_\_\_\_

10) x value of 4 and y value of 3. Find the radius.

10. \_\_\_\_\_

11) x value of 2 and y value of 5. Find the radius.

11. \_\_\_\_\_

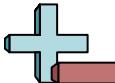
12) y value of 3 and x value of 9.54. Find the radius.

12. \_\_\_\_\_

13) x value of 3 and y value of 4. Find the radius.

13. \_\_\_\_\_

**Answers**



# Solving Circle Equations

Name: **Answer Key**

Solve each problem. Round to two decimal places.

- 1) y value of 2 and x value of 6.71. Find the radius.

$$\begin{aligned}x^2 &= 7^2 - 2^2 \\x &= \pm\sqrt{45}\end{aligned}$$

- 2) x value of 2 and y value of 2. Find the radius.

$$\begin{aligned}r^2 &= 2^2 + 2^2 \\r &= \pm\sqrt{10}\end{aligned}$$

- 3) x value of 5 and y value of 3. Find the radius.

$$\begin{aligned}r^2 &= 5^2 + 3^2 \\r &= \pm\sqrt{6}\end{aligned}$$

- 4) x value of 5 and radius of 6. Find the value of y.

$$\begin{aligned}y^2 &= 6^2 - 5^2 \\y &= \pm\sqrt{11}\end{aligned}$$

- 5) x value of 3 and y value of 2. Find the radius.

$$\begin{aligned}r^2 &= 3^2 + 2^2 \\r &= \pm\sqrt{10}\end{aligned}$$

- 6) x value of 4 and y value of 3. Find the radius.

$$\begin{aligned}r^2 &= 4^2 + 3^2 \\r &= \pm\sqrt{9}\end{aligned}$$

- 7) x value of 2 and y value of 2. Find the radius.

$$\begin{aligned}r^2 &= 2^2 + 2^2 \\r &= \pm\sqrt{7}\end{aligned}$$

- 8) x value of 2 and radius of 9. Find the value of y.

$$\begin{aligned}y^2 &= 9^2 - 2^2 \\y &= \pm\sqrt{77}\end{aligned}$$

- 9) x value of 3 and y value of 3. Find the radius.

$$\begin{aligned}r^2 &= 3^2 + 3^2 \\r &= \pm\sqrt{6}\end{aligned}$$

- 10) x value of 4 and y value of 3. Find the radius.

$$\begin{aligned}r^2 &= 4^2 + 3^2 \\r &= \pm\sqrt{6}\end{aligned}$$

- 11) x value of 2 and y value of 5. Find the radius.

$$\begin{aligned}r^2 &= 2^2 + 5^2 \\r &= \pm\sqrt{8}\end{aligned}$$

- 12) y value of 3 and x value of 9.54. Find the radius.

$$\begin{aligned}x^2 &= 10^2 - 3^2 \\x &= \pm\sqrt{91}\end{aligned}$$

- 13) x value of 3 and y value of 4. Find the radius.

$$\begin{aligned}r^2 &= 3^2 + 4^2 \\r &= \pm\sqrt{10}\end{aligned}$$

## Answers

1. **±6.71**

2. **±2.83**

3. **±5.83**

4. **±3.32**

5. **±3.61**

6. **±5.00**

7. **±2.83**

8. **±8.77**

9. **±4.24**

10. **±5.00**

11. **±5.39**

12. **±9.54**

13. **±5.00**