



## Solving Circle Equations

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

Solve each problem. Round to two decimal places.

1) y value of 3 and x value of 6.32. Find the radius.

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

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

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

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

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

4) y value of 4 and x value of 9.17. Find the radius.

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

5) y value of 5 and x value of 3.32. Find the radius.

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

6) y value of 2 and x value of 7.75. Find the radius.

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

7) y value of 4 and x value of 8.06. Find the radius.

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

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

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

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

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

10) x value of 2 and radius of 10. Find the value of y.

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

11) y value of 4 and x value of 6.93. Find the radius.

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

12) x value of 4 and radius of 7. Find the value of y.

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

13) y value of 3 and x value of 8.49. Find the radius.

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

**Answers**



# Solving Circle Equations

Name: **Answer Key**

Solve each problem. Round to two decimal places.

- 1) y value of 3 and x value of 6.32. Find the radius.

$$\begin{aligned}x^2 &= 7^2 - 3^2 \\x &= \pm\sqrt{40}\end{aligned}$$

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

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

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

$$\begin{aligned}y^2 &= 10^2 - 4^2 \\y &= \pm\sqrt{84}\end{aligned}$$

- 4) y value of 4 and x value of 9.17. Find the radius.

$$\begin{aligned}x^2 &= 10^2 - 4^2 \\x &= \pm\sqrt{84}\end{aligned}$$

- 5) y value of 5 and x value of 3.32. Find the radius.

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

- 6) y value of 2 and x value of 7.75. Find the radius.

$$\begin{aligned}x^2 &= 8^2 - 2^2 \\x &= \pm\sqrt{60}\end{aligned}$$

- 7) y value of 4 and x value of 8.06. Find the radius.

$$\begin{aligned}x^2 &= 9^2 - 4^2 \\x &= \pm\sqrt{65}\end{aligned}$$

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

$$\begin{aligned}y^2 &= 6^2 - 3^2 \\y &= \pm\sqrt{27}\end{aligned}$$

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

$$\begin{aligned}r^2 &= 5^2 + 3^2 \\r &= \pm\sqrt{10}\end{aligned}$$

- 10) x value of 2 and radius of 10. Find the value of y.

$$\begin{aligned}y^2 &= 10^2 - 2^2 \\y &= \pm\sqrt{96}\end{aligned}$$

- 11) y value of 4 and x value of 6.93. Find the radius.

$$\begin{aligned}x^2 &= 8^2 - 4^2 \\x &= \pm\sqrt{48}\end{aligned}$$

- 12) x value of 4 and radius of 7. Find the value of y.

$$\begin{aligned}y^2 &= 7^2 - 4^2 \\y &= \pm\sqrt{33}\end{aligned}$$

- 13) y value of 3 and x value of 8.49. Find the radius.

$$\begin{aligned}x^2 &= 9^2 - 3^2 \\x &= \pm\sqrt{72}\end{aligned}$$

## Answers

1. **±6.32**

2. **±9.54**

3. **±9.17**

4. **±9.17**

5. **±3.32**

6. **±7.75**

7. **±8.06**

8. **±5.20**

9. **±5.83**

10. **±9.80**

11. **±6.93**

12. **±5.74**

13. **±8.49**