



## Solving Circle Equations

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

Solve each problem. Round to two decimal places.

1) y value of 5 and x value of 7.48. Find the radius.

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

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

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

3) x value of 5 and radius of 10. Find the value of y.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

12) y value of 4 and x value of 4.47. Find the radius.

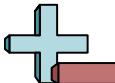
12. \_\_\_\_\_

13) y value of 4 and x value of 5.74. Find the radius.

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

**Answers**

1-10	92	85	77	69	62	54	46	38	31	23
11-13	15	8	0							



# Solving Circle Equations

Name: **Answer Key**

Solve each problem. Round to two decimal places.

- 1) y value of 5 and x value of 7.48. Find the radius.

$$\begin{aligned}x^2 &= 9^2 - 5^2 \\x &= \pm\sqrt{56}\end{aligned}$$

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

$$\begin{aligned}y^2 &= 8^2 - 3^2 \\y &= \pm\sqrt{55}\end{aligned}$$

- 3) x value of 5 and radius of 10. Find the value of y.

$$\begin{aligned}y^2 &= 10^2 - 5^2 \\y &= \pm\sqrt{75}\end{aligned}$$

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

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

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

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

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

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

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

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

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

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

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

$$\begin{aligned}r^2 &= 4^2 + 5^2 \\r &= \pm\sqrt{10}\end{aligned}$$

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

$$\begin{aligned}r^2 &= 4^2 + 3^2 \\r &= \pm\sqrt{8}\end{aligned}$$

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

$$\begin{aligned}y^2 &= 9^2 - 5^2 \\y &= \pm\sqrt{56}\end{aligned}$$

- 12) y value of 4 and x value of 4.47. Find the radius.

$$\begin{aligned}x^2 &= 6^2 - 4^2 \\x &= \pm\sqrt{20}\end{aligned}$$

- 13) y value of 4 and x value of 5.74. Find the radius.

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

## Answers

1. **±7.48**

2. **±7.42**

3. **±8.66**

4. **±5.00**

5. **±5.39**

6. **±5.00**

7. **±8.49**

8. **±3.32**

9. **±6.40**

10. **±5.00**

11. **±7.48**

12. **±4.47**

13. **±5.74**