



## Solving Circle Equations

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

Solve each problem. Round to two decimal places.

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

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

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

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

3) y value of 3 and x value of 7.42. Find the radius.

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

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

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

5) y value of 2 and x value of 8.77. Find the radius.

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

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

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

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

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

8) y value of 5 and x value of 6.24. Find the radius.

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

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

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

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

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

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

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

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

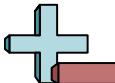
12. \_\_\_\_\_

13) y value of 2 and x value of 7.75. 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) x value of 3 and y value of 4. Find the radius.

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

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

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

- 3) y value of 3 and x value of 7.42. Find the radius.

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

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

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

- 5) y value of 2 and x value of 8.77. Find the radius.

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

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

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

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

$$\begin{aligned} r^2 &= 4^2 + 5^2 \\ r &= \pm\sqrt{6} \end{aligned}$$

- 8) y value of 5 and x value of 6.24. Find the radius.

$$\begin{aligned} x^2 &= 8^2 - 5^2 \\ x &= \pm\sqrt{39} \end{aligned}$$

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

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

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

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

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

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

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

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

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

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

## Answers

1. **±5.00**

2. **±9.17**

3. **±7.42**

4. **±7.75**

5. **±8.77**

6. **±6.32**

7. **±6.40**

8. **±6.24**

9. **±6.32**

10. **±9.17**

11. **±5.74**

12. **±5.00**

13. **±7.75**