



## Solving Circle Equations

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

Solve each problem. Round to two decimal places.

## Answers

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

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

2) y value of 2 and x value of 5.66. Find the radius.

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

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

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

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

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

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

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

6) y value of 2 and x value of 9.80. Find the radius.

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

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

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

8) y value of 2 and x value of 5.66. Find the radius.

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

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

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

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

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

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

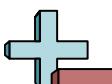
11. \_\_\_\_\_

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

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

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

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



# Solving Circle Equations

Name: **Answer Key**

Solve each problem. Round to two decimal places.

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

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

- 2) y value of 2 and x value of 5.66. Find the radius.

$$\begin{aligned} x^2 &= 6^2 - 2^2 \\ x &= \pm\sqrt{32} \end{aligned}$$

- 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 4 and y value of 5. Find the radius.

$$\begin{aligned} r^2 &= 4^2 + 5^2 \\ r &= \pm\sqrt{7} \end{aligned}$$

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

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

- 6) y value of 2 and x value of 9.80. Find the radius.

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

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

$$\begin{aligned} r^2 &= 3^2 + 4^2 \\ r &= \pm\sqrt{7} \end{aligned}$$

- 8) y value of 2 and x value of 5.66. Find the radius.

$$\begin{aligned} x^2 &= 6^2 - 2^2 \\ x &= \pm\sqrt{32} \end{aligned}$$

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

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

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

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

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

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

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

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

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

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

## Answers

1. **±3.61**

2. **±5.66**

3. **±7.42**

4. **±6.40**

5. **±6.71**

6. **±9.80**

7. **±5.00**

8. **±5.66**

9. **±8.49**

10. **±6.24**

11. **±7.42**

12. **±4.47**

13. **±9.54**