

## Solving Circle Equations

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

Solve each problem. Round to two decimal places.

**Answers**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

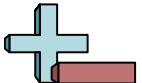
12. \_\_\_\_\_

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

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

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

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



# Solving Circle Equations

Name: **Answer Key**

Solve each problem. Round to two decimal places.

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

$$\begin{aligned} r^2 &= 2^2 + 5^2 \\ r &= \pm\sqrt{29} \end{aligned}$$

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

$$\begin{aligned} r^2 &= 3^2 + 5^2 \\ r &= \pm\sqrt{34} \end{aligned}$$

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

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

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

$$\begin{aligned} r^2 &= 4^2 + 3^2 \\ r &= \pm\sqrt{25} \end{aligned}$$

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

$$\begin{aligned} r^2 &= 4^2 + 3^2 \\ r &= \pm\sqrt{25} \end{aligned}$$

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

$$\begin{aligned} r^2 &= 2^2 + 3^2 \\ r &= \pm\sqrt{13} \end{aligned}$$

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

$$\begin{aligned} r^2 &= 5^2 + 5^2 \\ r &= \pm\sqrt{50} \end{aligned}$$

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

$$\begin{aligned} r^2 &= 5^2 + 5^2 \\ r &= \pm\sqrt{50} \end{aligned}$$

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

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

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

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

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

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

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

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

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

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

## Answers

1. **±5.39**

2. **±5.83**

3. **±7.48**

4. **±5.00**

5. **±5.00**

6. **±3.61**

7. **±7.07**

8. **±7.07**

9. **±5.74**

10. **±7.75**

11. **±7.75**

12. **±6.32**

13. **±8.06**