



## Solving Circle Equations

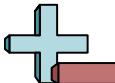
Name: \_\_\_\_\_

Solve each problem. Round to two decimal places.

- 1) x value of 3 and y value of 5. Find the radius.
- 2) y value of 2 and x value of 7.75. Find the radius.
- 3) y value of 3 and x value of 7.42. Find the radius.
- 4) x value of 2 and y value of 4. Find the radius.
- 5) x value of 3 and radius of 8. Find the value of y.
- 6) x value of 5 and radius of 6. Find the value of y.
- 7) y value of 5 and x value of 3.32. Find the radius.
- 8) x value of 4 and radius of 10. Find the value of y.
- 9) x value of 4 and radius of 8. Find the value of y.
- 10) x value of 2 and y value of 4. Find the radius.
- 11) x value of 3 and y value of 4. Find the radius.
- 12) y value of 3 and x value of 9.54. Find the radius.
- 13) x value of 2 and y value of 5. Find the radius.

## Answers

1.	_____
2.	_____
3.	_____
4.	_____
5.	_____
6.	_____
7.	_____
8.	_____
9.	_____
10.	_____
11.	_____
12.	_____
13.	_____
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 5. Find the radius.

$$\begin{aligned} r^2 &= 3^2 + 5^2 \\ r &= \pm\sqrt{9} \end{aligned}$$

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

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

- 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 y value of 4. Find the radius.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\begin{aligned} r^2 &= 2^2 + 5^2 \\ r &= \pm\sqrt{9} \end{aligned}$$

## Answers

1. **±5.83**

2. **±7.75**

3. **±7.42**

4. **±4.47**

5. **±7.42**

6. **±3.32**

7. **±3.32**

8. **±9.17**

9. **±6.93**

10. **±4.47**

11. **±5.00**

12. **±9.54**

13. **±5.39**

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