

## Solving Circle Equations

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

Solve each problem. Round to two decimal places.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

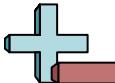
12. \_\_\_\_\_

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

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

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

$$\begin{aligned}y^2 &= 6^2 - 3^2 \\y &= \pm\sqrt{27}\end{aligned}$$

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

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

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

$$\begin{aligned}y^2 &= 6^2 - 3^2 \\y &= \pm\sqrt{27}\end{aligned}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\begin{aligned}r^2 &= 4^2 + 3^2 \\r &= \pm\sqrt{9}\end{aligned}$$

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

$$\begin{aligned}r^2 &= 5^2 + 3^2 \\r &= \pm\sqrt{7}\end{aligned}$$

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

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

## Answers

1. **±7.75**

2. **±5.20**

3. **±3.61**

4. **±5.20**

5. **±2.83**

6. **±8.66**

7. **±4.47**

8. **±6.32**

9. **±5.66**

10. **±3.61**

11. **±5.00**

12. **±5.83**

13. **±2.83**