

Solving Circle Equations

Name: _____

Solve each problem. Round to two decimal places.

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

1. _____

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

2. _____

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

3. _____

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

4. _____

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

5. _____

6) y value of 4 and x value of 8.06. Find the radius.

6. _____

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

7. _____

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

8. _____

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

9. _____

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

10. _____

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

11. _____

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

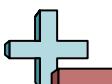
12. _____

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

13. _____

Answers

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



Solve each problem. Round to two decimal places.

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

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

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

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

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

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

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

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

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

$$\begin{aligned}r^2 &= 4^2 + 2^2 \\r &= \pm\sqrt{20}\end{aligned}$$

- 6) y value of 4 and x value of 8.06. Find the radius.

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

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

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

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

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

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

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

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

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

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

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

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

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

Answers

1. **±8.49**

2. **±3.61**

3. **±2.83**

4. **±8.06**

5. **±4.47**

6. **±8.06**

7. **±5.20**

8. **±5.83**

9. **±9.80**

10. **±5.74**

11. **±7.42**

12. **±5.83**

13. **±5.66**