



Solving Circle Equations

Name: _____

Solve each problem. Round to two decimal places.

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

1. _____

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

2. _____

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

3. _____

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

4. _____

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

5. _____

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

6. _____

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

7. _____

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

8. _____

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

9. _____

10) y value of 2 and x value of 8.77. Find the radius.

10. _____

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

11. _____

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

12. _____

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

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 5.66. Find the radius.

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

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

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

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

$$\begin{aligned}y^2 &= 7^2 - 5^2 \\y &= \pm\sqrt{24}\end{aligned}$$

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

$$\begin{aligned}r^2 &= 3^2 + 5^2 \\r &= \pm\sqrt{8}\end{aligned}$$

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

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

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

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

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

$$\begin{aligned}y^2 &= 9^2 - 2^2 \\y &= \pm\sqrt{77}\end{aligned}$$

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

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

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

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

- 10) y value of 2 and x value of 8.77. Find the radius.

$$\begin{aligned}x^2 &= 9^2 - 2^2 \\x &= \pm\sqrt{77}\end{aligned}$$

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

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

- 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 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. **±5.66**

2. **±9.80**

3. **±4.90**

4. **±5.83**

5. **±3.32**

6. **±6.32**

7. **±8.77**

8. **±5.74**

9. **±4.47**

10. **±8.77**

11. **±9.80**

12. **±9.54**

13. **±8.06**