



Solving Circle Equations

Name: _____

Solve each problem. Round to two decimal places.

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

1. _____

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

2. _____

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

3. _____

4) y value of 5 and x value of 4.90. Find the radius.

4. _____

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

5. _____

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

6. _____

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

7. _____

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

8. _____

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

9. _____

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

10. _____

11) x value of 5 and radius of 9. Find the value of y.

11. _____

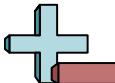
12) x value of 3 and radius of 8. Find the value of y.

12. _____

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

13. _____

Answers



Solving Circle Equations

Name: **Answer Key**

Solve each problem. Round to two decimal places.

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

$$\begin{aligned} r^2 &= 2^2 + 4^2 \\ r &= \pm\sqrt{6} \end{aligned}$$

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

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

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

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

- 4) y value of 5 and x value of 4.90. Find the radius.

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

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

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

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

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

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

$$\begin{aligned} y^2 &= 8^2 - 5^2 \\ y &= \pm\sqrt{39} \end{aligned}$$

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

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

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

$$\begin{aligned} r^2 &= 3^2 + 5^2 \\ r &= \pm\sqrt{6} \end{aligned}$$

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

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

- 11) x value of 5 and radius of 9. Find the value of y.

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

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

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

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

$$\begin{aligned} r^2 &= 4^2 + 5^2 \\ r &= \pm\sqrt{10} \end{aligned}$$

Answers

1. **±4.47**

2. **±3.32**

3. **±6.32**

4. **±4.90**

5. **±6.32**

6. **±6.93**

7. **±6.24**

8. **±8.06**

9. **±5.83**

10. **±3.32**

11. **±7.48**

12. **±7.42**

13. **±6.40**