

## Solving Circle Equations

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

Solve each problem. Round to two decimal places.

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

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

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

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

3) y value of 3 and x value of 8.49. Find the radius.

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

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

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

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

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

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

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

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

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

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

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

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

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

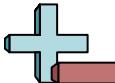
12) y value of 2 and x value of 8.77. Find the radius.

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

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

13. \_\_\_\_\_

**Answers**



# Solving Circle Equations

Name: **Answer Key**

Solve each problem. Round to two decimal places.

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

$$y^2 = 7^2 - 3^2$$

$$y = \pm\sqrt{40}$$

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

$$y^2 = 6^2 - 3^2$$

$$y = \pm\sqrt{27}$$

- 3) y value of 3 and x value of 8.49. Find the radius.

$$x^2 = 9^2 - 3^2$$

$$x = \pm\sqrt{72}$$

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

$$r^2 = 3^2 + 2^2$$

$$r = \pm\sqrt{9}$$

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

$$x^2 = 7^2 - 3^2$$

$$x = \pm\sqrt{40}$$

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

$$y^2 = 6^2 - 4^2$$

$$y = \pm\sqrt{20}$$

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

$$y^2 = 7^2 - 4^2$$

$$y = \pm\sqrt{33}$$

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

$$x^2 = 9^2 - 4^2$$

$$x = \pm\sqrt{65}$$

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

$$y^2 = 8^2 - 5^2$$

$$y = \pm\sqrt{39}$$

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

$$y^2 = 10^2 - 4^2$$

$$y = \pm\sqrt{84}$$

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

$$y^2 = 9^2 - 3^2$$

$$y = \pm\sqrt{72}$$

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

$$x^2 = 9^2 - 2^2$$

$$x = \pm\sqrt{77}$$

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

$$x^2 = 10^2 - 2^2$$

$$x = \pm\sqrt{96}$$

## Answers

1. **±6.32**

2. **±5.20**

3. **±8.49**

4. **±3.61**

5. **±6.32**

6. **±4.47**

7. **±5.74**

8. **±8.06**

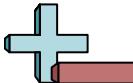
9. **±6.24**

10. **±9.17**

11. **±8.49**

12. **±8.77**

13. **±9.80**



## 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**



# Solving Circle Equations

Name: **Answer Key**

Solve each problem. Round to two decimal places.

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

$$y^2 = 9^2 - 3^2$$

$$y = \pm\sqrt{72}$$

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

$$r^2 = 3^2 + 2^2$$

$$r = \pm\sqrt{13}$$

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

$$r^2 = 2^2 + 2^2$$

$$r = \pm\sqrt{8}$$

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

$$y^2 = 9^2 - 4^2$$

$$y = \pm\sqrt{65}$$

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

$$r^2 = 4^2 + 2^2$$

$$r = \pm\sqrt{20}$$

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

$$x^2 = 9^2 - 4^2$$

$$x = \pm\sqrt{65}$$

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

$$y^2 = 6^2 - 3^2$$

$$y = \pm\sqrt{27}$$

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

$$r^2 = 3^2 + 5^2$$

$$r = \pm\sqrt{34}$$

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

$$y^2 = 10^2 - 2^2$$

$$y = \pm\sqrt{96}$$

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

$$y^2 = 7^2 - 4^2$$

$$y = \pm\sqrt{33}$$

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

$$y^2 = 8^2 - 3^2$$

$$y = \pm\sqrt{55}$$

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

$$r^2 = 3^2 + 5^2$$

$$r = \pm\sqrt{34}$$

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

$$x^2 = 6^2 - 2^2$$

$$x = \pm\sqrt{32}$$

## 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**

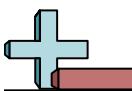
9. **±9.80**

10. **±5.74**

11. **±7.42**

12. **±5.83**

13. **±5.66**



## Solving Circle Equations

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

Solve each problem. Round to two decimal places.

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

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

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

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

3) y value of 3 and x value of 7.42. Find the radius.

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

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

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

5) y value of 2 and x value of 6.71. Find the radius.

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

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

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

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

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

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

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

9) y value of 3 and x value of 8.49. Find the radius.

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

10) y value of 5 and x value of 6.24. Find the radius.

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

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

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

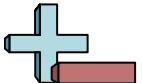
12) x value of 4 and y value of 2. Find the radius.

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

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

13. \_\_\_\_\_

**Answers**



Solve each problem. Round to two decimal places.

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

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

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

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

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

$$\begin{aligned} r^2 &= 4^2 + 5^2 \\ r &= \pm\sqrt{7} \end{aligned}$$

- 5) y value of 2 and x value of 6.71. Find the radius.

$$\begin{aligned} x^2 &= 7^2 - 2^2 \\ x &= \pm\sqrt{45} \end{aligned}$$

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

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

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

$$\begin{aligned} r^2 &= 3^2 + 4^2 \\ r &= \pm\sqrt{7} \end{aligned}$$

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

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

- 9) y value of 3 and x value of 8.49. Find the radius.

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

- 10) y value of 5 and x value of 6.24. Find the radius.

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

- 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 4 and y value of 2. Find the radius.

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

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

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

## Answers

1.  **$\pm 3.61$**

2.  **$\pm 5.66$**

3.  **$\pm 7.42$**

4.  **$\pm 6.40$**

5.  **$\pm 6.71$**

6.  **$\pm 9.80$**

7.  **$\pm 5.00$**

8.  **$\pm 5.66$**

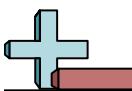
9.  **$\pm 8.49$**

10.  **$\pm 6.24$**

11.  **$\pm 7.42$**

12.  **$\pm 4.47$**

13.  **$\pm 9.54$**



## Solving Circle Equations

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

Solve each problem. Round to two decimal places.

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

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

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

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

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

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

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

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

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

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

6) x value of 2 and radius of 8. Find the value of y.

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

7) x value of 2 and radius of 8. Find the value of y.

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

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

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

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

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

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

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

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

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

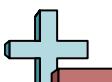
12) x value of 4 and y value of 5. Find the radius.

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

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

13. \_\_\_\_\_

**Answers**



# Solving Circle Equations

Name: **Answer Key**

Solve each problem. Round to two decimal places.

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

$$y^2 = 6^2 - 3^2$$

$$y = \pm\sqrt{27}$$

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

$$r^2 = 2^2 + 3^2$$

$$r = \pm\sqrt{9}$$

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

$$y^2 = 7^2 - 4^2$$

$$y = \pm\sqrt{33}$$

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

$$y^2 = 10^2 - 4^2$$

$$y = \pm\sqrt{84}$$

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

$$r^2 = 4^2 + 2^2$$

$$r = \pm\sqrt{7}$$

- 6) x value of 2 and radius of 8. Find the value of y.

$$y^2 = 8^2 - 2^2$$

$$y = \pm\sqrt{60}$$

- 7) x value of 2 and radius of 8. Find the value of y.

$$y^2 = 8^2 - 2^2$$

$$y = \pm\sqrt{60}$$

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

$$r^2 = 5^2 + 4^2$$

$$r = \pm\sqrt{10}$$

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

$$r^2 = 5^2 + 3^2$$

$$r = \pm\sqrt{8}$$

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

$$r^2 = 2^2 + 3^2$$

$$r = \pm\sqrt{8}$$

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

$$y^2 = 9^2 - 3^2$$

$$y = \pm\sqrt{72}$$

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

$$r^2 = 4^2 + 5^2$$

$$r = \pm\sqrt{7}$$

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

$$x^2 = 7^2 - 5^2$$

$$x = \pm\sqrt{24}$$

## Answers

1. **±5.20**

2. **±3.61**

3. **±5.74**

4. **±9.17**

5. **±4.47**

6. **±7.75**

7. **±7.75**

8. **±6.40**

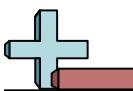
9. **±5.83**

10. **±3.61**

11. **±8.49**

12. **±6.40**

13. **±4.90**



## 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. \_\_\_\_\_

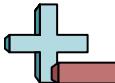
12) x value of 5 and y value of 3. Find the radius.

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

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

13. \_\_\_\_\_

**Answers**



# 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**

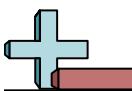
9. **±5.66**

10. **±3.61**

11. **±5.00**

12. **±5.83**

13. **±2.83**



## 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. \_\_\_\_\_

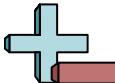
**Answers**

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

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

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

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



# 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**

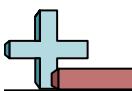
9. **±5.83**

10. **±3.32**

11. **±7.48**

12. **±7.42**

13. **±6.40**



## Solving Circle Equations

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

Solve each problem. Round to two decimal places.

1) y value of 2 and x value of 6.71. Find the radius.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

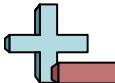
13) x value of 3 and y value of 4. Find the radius.

13. \_\_\_\_\_

**Answers**

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

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 6.71. Find the radius.

$$\begin{aligned}x^2 &= 7^2 - 2^2 \\x &= \pm\sqrt{45}\end{aligned}$$

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

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

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

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

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

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

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

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

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

$$\begin{aligned}r^2 &= 4^2 + 3^2 \\r &= \pm\sqrt{25}\end{aligned}$$

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

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

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

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

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

$$\begin{aligned}r^2 &= 3^2 + 3^2 \\r &= \pm\sqrt{18}\end{aligned}$$

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

$$\begin{aligned}r^2 &= 4^2 + 3^2 \\r &= \pm\sqrt{25}\end{aligned}$$

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

$$\begin{aligned}r^2 &= 2^2 + 5^2 \\r &= \pm\sqrt{29}\end{aligned}$$

- 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 3 and y value of 4. Find the radius.

$$\begin{aligned}r^2 &= 3^2 + 4^2 \\r &= \pm\sqrt{25}\end{aligned}$$

## Answers

1. **±6.71**

2. **±2.83**

3. **±5.83**

4. **±3.32**

5. **±3.61**

6. **±5.00**

7. **±2.83**

8. **±8.77**

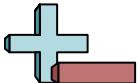
9. **±4.24**

10. **±5.00**

11. **±5.39**

12. **±9.54**

13. **±5.00**



## Solving Circle Equations

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

Solve each problem. Round to two decimal places.

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

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

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

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

3) y value of 3 and x value of 7.42. Find the radius.

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

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

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

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

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

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

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

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

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

8) x value of 2 and radius of 8. Find the value of y.

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

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

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

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

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

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

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

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

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

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

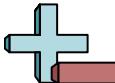
13. \_\_\_\_\_

**Answers**

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

13. \_\_\_\_\_

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



# Solving Circle Equations

Name: **Answer Key**

Solve each problem. Round to two decimal places.

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

$$\begin{aligned} r^2 &= 5^2 + 4^2 \\ r &= \pm\sqrt{41} \end{aligned}$$

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

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

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

$$\begin{aligned} r^2 &= 4^2 + 3^2 \\ r &= \pm\sqrt{10} \end{aligned}$$

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

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

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

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

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

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

- 8) x value of 2 and radius of 8. Find the value of y.

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

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

$$\begin{aligned} r^2 &= 5^2 + 4^2 \\ r &= \pm\sqrt{41} \end{aligned}$$

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

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

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

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

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

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

- 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. **±6.40**

2. **±5.74**

3. **±7.42**

4. **±5.00**

5. **±7.48**

6. **±7.48**

7. **±5.66**

8. **±7.75**

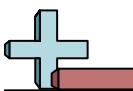
9. **±6.40**

10. **±6.24**

11. **±4.47**

12. **±5.66**

13. **±8.06**



## Solving Circle Equations

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

Solve each problem. Round to two decimal places.

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

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

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

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

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

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

4) y value of 4 and x value of 9.17. Find the radius.

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

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

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

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

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

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

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

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

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

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

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

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

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

11) y value of 4 and x value of 6.93. Find the radius.

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

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

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

13) y value of 3 and x value of 8.49. Find the radius.

13. \_\_\_\_\_

**Answers**



# Solving Circle Equations

Name: **Answer Key**

Solve each problem. Round to two decimal places.

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

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

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

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

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

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

- 4) y value of 4 and x value of 9.17. Find the radius.

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

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

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

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

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

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

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

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

$$\begin{aligned}r^2 &= 5^2 + 3^2 \\r &= \pm\sqrt{10}\end{aligned}$$

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

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

- 11) y value of 4 and x value of 6.93. Find the radius.

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

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

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

- 13) y value of 3 and x value of 8.49. Find the radius.

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

## Answers

1. **±6.32**

2. **±9.54**

3. **±9.17**

4. **±9.17**

5. **±3.32**

6. **±7.75**

7. **±8.06**

8. **±5.20**

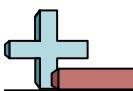
9. **±5.83**

10. **±9.80**

11. **±6.93**

12. **±5.74**

13. **±8.49**



## Solving Circle Equations

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

Solve each problem. Round to two decimal places.

**Answers**

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

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

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

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

3) y value of 5 and x value of 7.48. Find the radius.

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

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

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

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

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

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

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

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

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

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

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

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

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

10) x value of 2 and radius of 8. Find the value of y.

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

11) x value of 2 and radius of 8. Find the value of y.

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

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

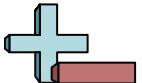
12. \_\_\_\_\_

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

13. \_\_\_\_\_

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

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



# Solving Circle Equations

Name: **Answer Key**

Solve each problem. Round to two decimal places.

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

$$\begin{aligned} r^2 &= 2^2 + 5^2 \\ r &= \pm\sqrt{29} \end{aligned}$$

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

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

- 3) y value of 5 and x value of 7.48. Find the radius.

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

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

$$\begin{aligned} r^2 &= 4^2 + 3^2 \\ r &= \pm\sqrt{25} \end{aligned}$$

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

$$\begin{aligned} r^2 &= 4^2 + 3^2 \\ r &= \pm\sqrt{25} \end{aligned}$$

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

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

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

$$\begin{aligned} r^2 &= 5^2 + 5^2 \\ r &= \pm\sqrt{50} \end{aligned}$$

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

$$\begin{aligned} r^2 &= 5^2 + 5^2 \\ r &= \pm\sqrt{50} \end{aligned}$$

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

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

- 10) x value of 2 and radius of 8. Find the value of y.

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

- 11) x value of 2 and radius of 8. Find the value of y.

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

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

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

- 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. **±5.39**

2. **±5.83**

3. **±7.48**

4. **±5.00**

5. **±5.00**

6. **±3.61**

7. **±7.07**

8. **±7.07**

9. **±5.74**

10. **±7.75**

11. **±7.75**

12. **±6.32**

13. **±8.06**