

Solving Circle Equations

Name: _____

Solve each problem. Round to two decimal places.

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

1. _____

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

2. _____

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

3. _____

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

4. _____

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

5. _____

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

6. _____

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

7. _____

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

8. _____

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

9. _____

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

10. _____

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

11. _____

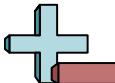
12) y value of 3 and x value of 5.20. Find the radius.

12. _____

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

13. _____

Answers



Solving Circle Equations

Name: **Answer Key**

Solve each problem. Round to two decimal places.

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

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

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

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

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

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

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

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

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

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

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

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

- 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 3 and x value of 6.32. Find the radius.

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

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

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

$$y^2 = 9^2 - 5^2$$

$$y = \pm\sqrt{56}$$

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

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

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

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

$$x^2 = 10^2 - 4^2$$

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

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

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

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

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

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

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

- 12) y value of 3 and x value of 5.20. Find the radius.

$$x^2 = 6^2 - 3^2$$

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

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

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

$$x = \pm\sqrt{45}$$

Answers

1. **± 4.47**

2. **± 6.32**

3. **± 3.61**

4. **± 8.77**

5. **± 4.47**

6. **± 6.32**

7. **± 7.48**

8. **± 7.42**

9. **± 9.17**

10. **± 3.61**

11. **± 4.47**

12. **± 5.20**

13. **± 6.71**