



Solving Circle Equations

Name: _____

Solve each problem. Round to two decimal places.

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

1. _____

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

2. _____

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

3. _____

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

4. _____

5) y value of 4 and x value of 4.47. Find the radius.

5. _____

6) y value of 4 and x value of 4.47. Find the radius.

6. _____

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

7. _____

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

8. _____

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

9. _____

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

10. _____

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

11. _____

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

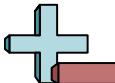
12. _____

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

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

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

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

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

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

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

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

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

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

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

$$y^2 = 7^2 - 5^2$$

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

- 5) y value of 4 and x value of 4.47. Find the radius.

$$x^2 = 6^2 - 4^2$$

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

- 6) y value of 4 and x value of 4.47. Find the radius.

$$x^2 = 6^2 - 4^2$$

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

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

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

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

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

$$x^2 = 9^2 - 5^2$$

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

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

$$x^2 = 8^2 - 3^2$$

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

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

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

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

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

$$y^2 = 10^2 - 5^2$$

$$y = \pm\sqrt{75}$$

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

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

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

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

$$x^2 = 9^2 - 5^2$$

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

Answers

1. **±6.24**

2. **±6.71**

3. **±4.90**

4. **±4.90**

5. **±4.47**

6. **±4.47**

7. **±4.47**

8. **±7.48**

9. **±7.42**

10. **±9.80**

11. **±8.66**

12. **±6.71**

13. **±7.48**