



## Solving Circle Equations

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

**Solve each problem. Round to two decimal places.****Answers**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

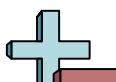
14. \_\_\_\_\_

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

15. \_\_\_\_\_

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

1-10	93	87	80	73	67	60	53	47	40	33
11-15	27	20	13	7	0					



# Solving Circle Equations

Name: **Answer Key**

**Solve each problem. Round to two decimal places.**

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

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

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

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

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

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

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

$$x^2 = 8^2 - 5^2$$

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

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

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

$$r = \pm\sqrt{41}$$

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

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

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

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

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

$$r = \pm\sqrt{41}$$

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

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

$$r = \pm\sqrt{29}$$

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

$$x^2 = 8^2 - 5^2$$

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

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

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

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

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

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

$$r = \pm\sqrt{41}$$

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

$$y^2 = 8^2 - 4^2$$

$$y = \pm\sqrt{48}$$

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

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

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

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

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

$$r = \pm\sqrt{41}$$

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

$$x^2 = 10^2 - 3^2$$

$$x = \pm\sqrt{91}$$

## Answers

1. **±6.71**

2. **±3.61**

3. **±6.24**

4. **±6.40**

5. **±3.61**

6. **±6.40**

7. **±5.39**

8. **±6.24**

9. **±8.77**

10. **±6.40**

11. **±6.93**

12. **±8.49**

13. **±6.40**

14. **±9.54**

15. **±6.71**

1-10	93	87	80	73	67	60	53	47	40	33
11-15	27	20	13	7	0					