



Solving Circle Equations

Name: _____

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

1) y value of 5 and x value of 8.66. Find the radius.

1. _____

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

2. _____

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

3. _____

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

4. _____

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

5. _____

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

6. _____

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

7. _____

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

8. _____

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

9. _____

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

10. _____

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

13. _____

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

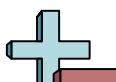
14. _____

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

15. _____

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

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) y value of 5 and x value of 8.66. Find the radius.

$$x^2 = 10^2 - 5^2$$

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

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

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

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

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

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

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

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

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

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

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

$$x^2 = 6^2 - 5^2$$

$$x = \pm\sqrt{11}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

$$y^2 = 6^2 - 5^2$$

$$y = \pm\sqrt{11}$$

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

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

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

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

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

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

Answers1. **± 8.66** 2. **± 6.40** 3. **± 2.83** 4. **± 2.83** 5. **± 7.42** 6. **± 3.32** 7. **± 5.66** 8. **± 4.90** 9. **± 6.40** 10. **± 7.48** 11. **± 3.32** 12. **± 5.20** 13. **± 5.39** 14. **± 8.06** 15. **± 5.20**