



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 y value of 4. Find the radius.

2. _____

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

3. _____

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

4. _____

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

5. _____

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

6. _____

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

7. _____

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

8. _____

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

9. _____

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

10. _____

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

11. _____

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

12. _____

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

$$r^2 = 3^2 + 4^2$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Answers

1. **±4.47**

2. **±5.00**

3. **±5.39**

4. **±5.39**

5. **±8.49**

6. **±5.83**

7. **±8.49**

8. **±3.61**

9. **±9.80**

10. **±7.75**

11. **±8.77**

12. **±5.39**

13. **±5.83**