

## Solving Circle Equations

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

Solve each problem. Round to two decimal places.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

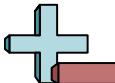
12) x value of 4 and y value of 5. Find the radius.

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

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

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

**Answers**



# Solving Circle Equations

Name: **Answer Key**

Solve each problem. Round to two decimal places.

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

$$y^2 = 6^2 - 3^2$$

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

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

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

$$r = \pm\sqrt{9}$$

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

$$y^2 = 7^2 - 4^2$$

$$y = \pm\sqrt{33}$$

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

$$y^2 = 10^2 - 4^2$$

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

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

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

$$r = \pm\sqrt{7}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$r = \pm\sqrt{7}$$

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

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

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

## Answers

1. **±5.20**

2. **±3.61**

3. **±5.74**

4. **±9.17**

5. **±4.47**

6. **±7.75**

7. **±7.75**

8. **±6.40**

9. **±5.83**

10. **±3.61**

11. **±8.49**

12. **±6.40**

13. **±4.90**

1-10	92	85	77	69	62	54	46	38	31	23
11-13	15	8	0							