

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. _____

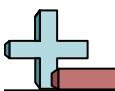
12) x value of 4 and y value of 5. Find the radius.

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**