

Solving equations with square roots

Review. Find the vertex of the parabola.

1. $y = x^2 - 3x + \frac{1}{4}$

Solve the equation.

2. $\sqrt{4x + 1} = 3$

3. $\sqrt{y - 5} - 3 = 2$

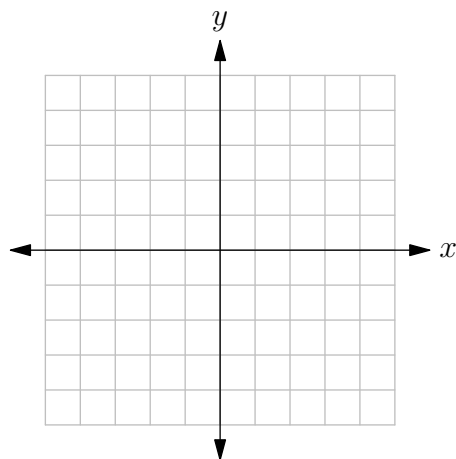
4. $\sqrt{x + 1} + 1 = x$

5. $\sqrt{x + 3} - 1 = x$

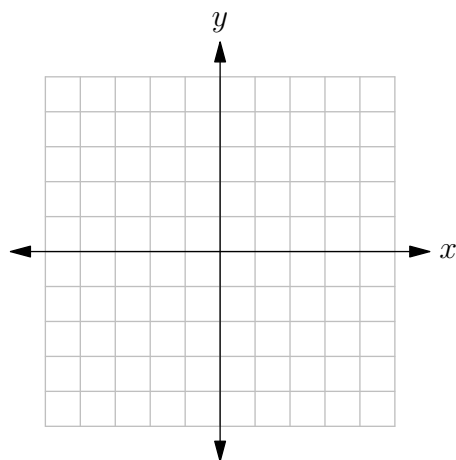
6. $\sqrt{x} - \sqrt{x - 5} = 1$

Determine the domain of each function and then graph it.

7. $f(x) = \sqrt{x + 2}$



8. $f(x) = \sqrt{x - 2} + 1$



ANSWERS

1. $(3/2, -2)$

2. $x = 2$

3. $y = 20$

4. $x = 3$

5. $x = 1$

6. $x = 9$

7. Domain: $[-2, \infty)$

8. Domain: $[2, \infty)$