

Simplify each square root.

1. $\sqrt{8}$

2. $\sqrt{18}$

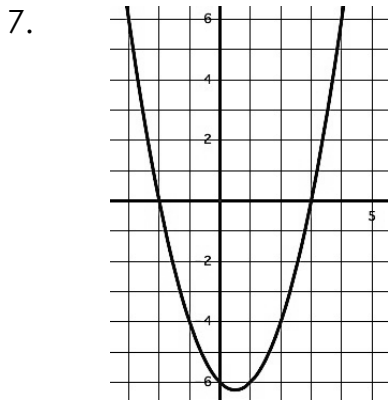
3. $\sqrt{32}$

4. $\sqrt{20}$

5. $\sqrt{45}$

6. $\sqrt{80}$

Write an equation in vertex form or factored form, then change to standard form.



factored form:

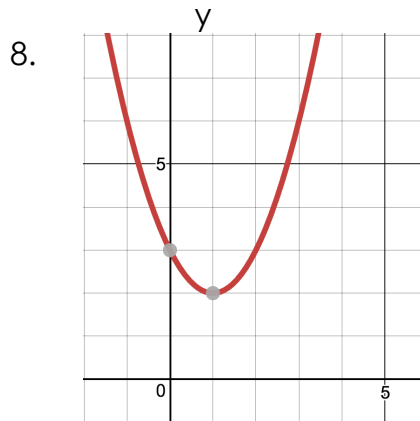
standard form:

Are the x-intercepts Real or Imaginary?

Solve using factoring, completing the square or the quadratic formula, show work.

9. $A(x) = x^2 + 4x - 21$

10. $B(x) = 5x^2 + 16x + 3$



vertex form:

standard form:

Real or Imaginary?

Solve using factoring, completing the square or the quadratic formula, show work.

11. $C(x) = x^2 - 4x + 1$

12. $D(x) = x^2 - 16x + 4$

13. $E(x) = x^2 + 3x - 40$

14. $G(x) = x^2 - 3x$

15. Solve using quadratic formula: $f(x) = x^2 + 5x + 10$.

What do you notice about the solution to #15 that is different from the rest of the problems?