Objective 2 - Graphing quadratic functions.

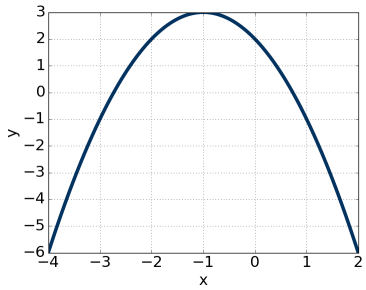
Describe the salient characteristics of quadratic functions.

Link to section in online textbook.

First, watch this video to review the main characteristics of a quadratic function. Feel free to pause the video and fill out the notes as you go.

Now practice working with converting between quadratic equations and their graphs below.

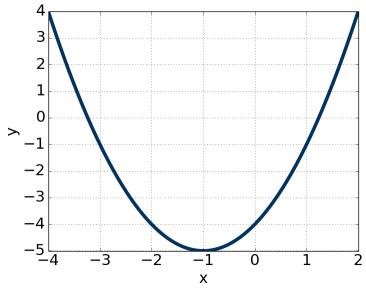
Question 1 *Write the equation of the graph presented below in the form* $f(x) = ax^2 + bx + c$*, assuming* $a = 1$ *or* $a = -1$.



$y = \boxed{-1}x^2 + \boxed{-2}x + \boxed{2}$

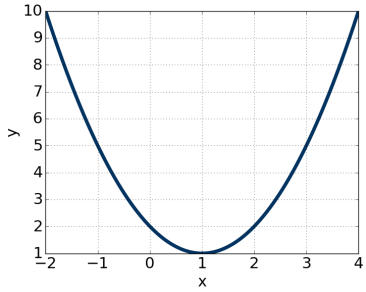
Question 2 *Write the equation of the graph presented below in the form* $f(x) = ax^2 + bx + c$*, assuming* $a = 1$ *or* $a = -1$.

Learning outcomes: Understand and solve quadratic equations.
Author(s): Darryl Chamberlain Jr.



$y = \boxed{1}x^2 + \boxed{2}x + \boxed{-4}$

Question 3 *Write the equation of the graph presented below in the form* $f(x) = ax^2 + bx + c$*, assuming* $a = 1$ *or* $a = -1$*.*



$y = \boxed{1}x^2 + \boxed{-2}x + \boxed{2}$

Question 4 *Graph the equation* $f(x) = (x-3)^2 - 19$*.*

Multiple Choice:

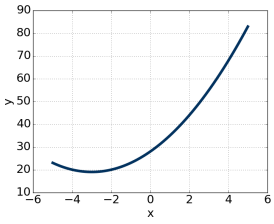
(a) *A*

(b) *B*

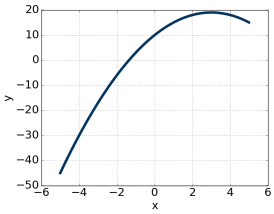
(c) *C*

(d) *D*

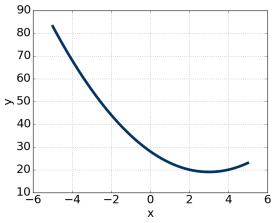
(e) *E* ✓



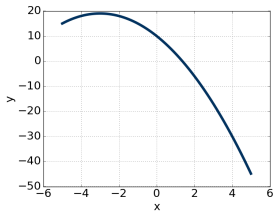
Choice A



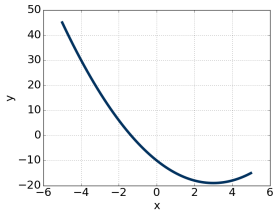
Choice B



Choice C



Choice D



Choice E