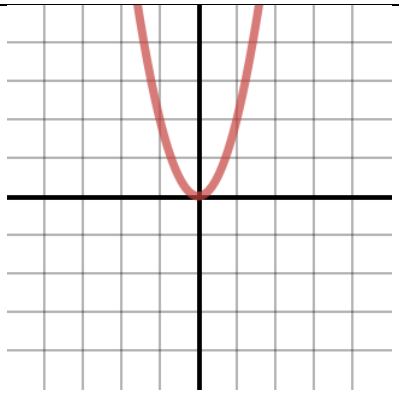
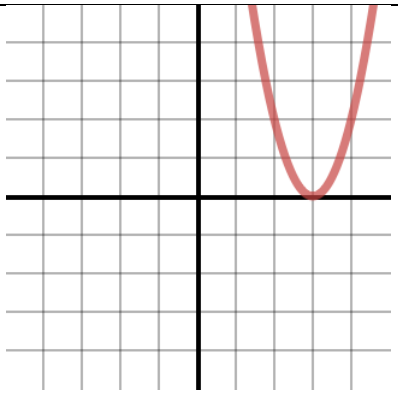
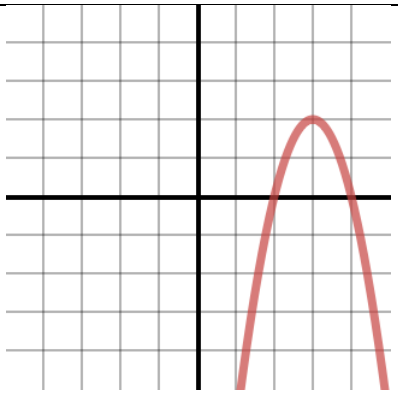


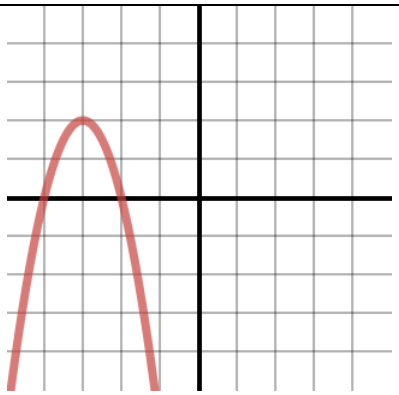
Graph 1



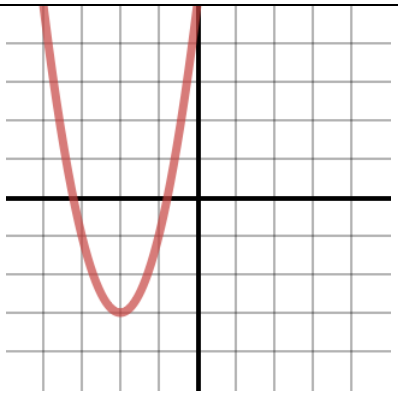
Graph 2



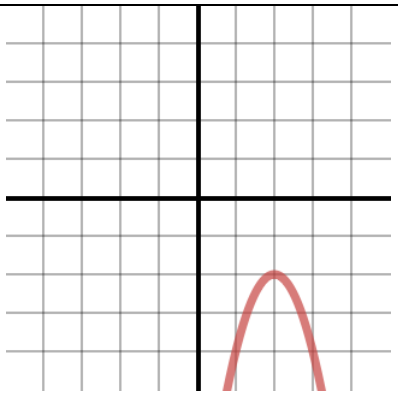
Graph 3



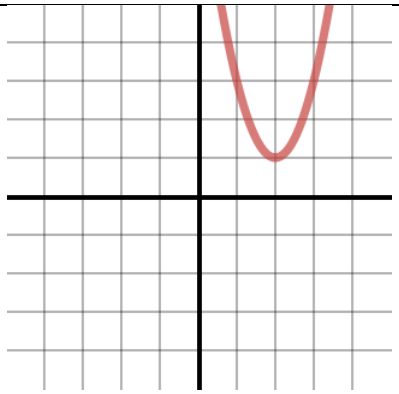
Graph 4



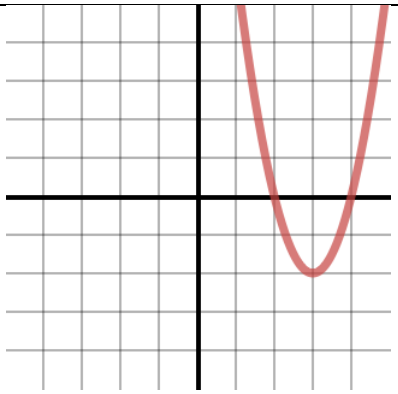
Graph 5



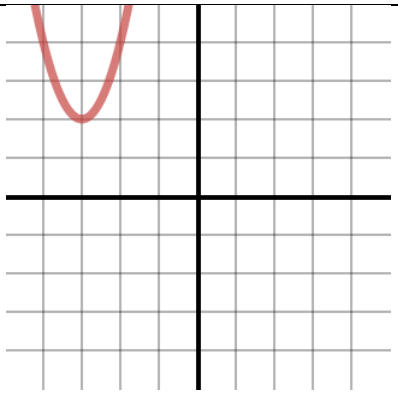
Graph 6



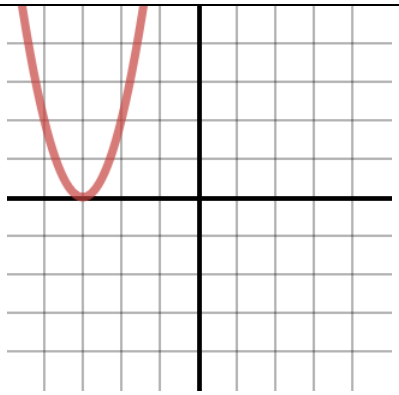
Graph 7



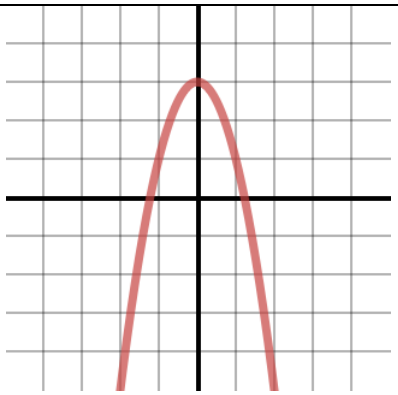
Graph 8



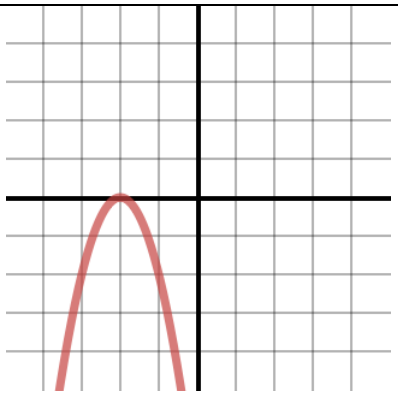
Graph 9



Graph 10



Graph 11



Graph 12

$y = x^2$	$y = x^2 - 6x + 9$	$y = -x^2 + 6x - 7$
$y = -x^2 - 6x - 7$	$y = x^2 + 4x + 1$	$y = -x^2 + 4x - 6$
$y = x^2 - 4x + 5$	$y = x^2 - 6x + 7$	$y = x^2 + 6x + 11$
$y = x^2 + 6x + 9$	$y = -x^2 + 3$	$y = -x^2 - 4x - 4$

$(0,0)$ Vertex	$(3,0)$ Vertex	$(3,2)$ Vertex
$(-3,2)$ Vertex	$(-2,-3)$ Vertex	$(2,-2)$ Vertex
$(2,1)$ Vertex	$(3,-2)$ Vertex	$(-3,2)$ Vertex
$(-3,0)$ Vertex	$(0,3)$ Vertex	$(-2,0)$ Vertex

Opens Up	Opens Up	Opens Down
Opens Down	Opens Up	Opens Down
Opens Up	Opens Up	Opens Up
Opens Up	Opens Down	Opens Down

$(-\infty, \infty)$ Domain	$(-\infty, \infty)$ Domain	$(-\infty, \infty)$ Domain
$(-\infty, \infty)$ Domain	$(-\infty, \infty)$ Domain	$(-\infty, \infty)$ Domain
$(-\infty, \infty)$ Domain	$(-\infty, \infty)$ Domain	$(-\infty, \infty)$ Domain
$(-\infty, \infty)$ Domain	$(-\infty, \infty)$ Domain	$(-\infty, \infty)$ Domain

$[0, \infty)$ Range	$[0, \infty)$ Range	$(-\infty, 2]$ Range
$(-\infty, 2]$ Range	$[-3, \infty)$ Range	$(-\infty, -2]$ Range
$[1, \infty)$ Range	$[-2, \infty)$ Range	$[2, \infty)$ Range
$[0, \infty)$ Range	$(-\infty, 3]$ Range	$(-\infty, 0]$ Range

$x = 0$ Axis of Symmetry	$x = 3$ Axis of Symmetry	$x = 3$ Axis of Symmetry
$x = -3$ Axis of Symmetry	$x = -2$ Axis of Symmetry	$x = 2$ Axis of Symmetry
$x = 2$ Axis of Symmetry	$x = 3$ Axis of Symmetry	$x = -3$ Axis of Symmetry
$x = -3$ Axis of Symmetry	$x = 0$ Axis of Symmetry	$x = -2$ Axis of Symmetry

$(0,0)$ y-intercept	$(0,9)$ y-intercept	$(0,-7)$ y-intercept
$(0,-7)$ y-intercept	$(0,1)$ y-intercept	$(0,-6)$ y-intercept
$(0,5)$ y-intercept	$(0,7)$ y-intercept	$(0,11)$ y-intercept
$(0,9)$ y-intercept	$(0,3)$ y-intercept	$(0,-4)$ y-intercept

$(0,0)$ 1 x-intercept	$(3,0)$ 1 x-intercept	$(1.6,0)$ and $(4.4,0)$ 2 x-intercepts
$(-1.6,0)$ and $(-4.4,0)$ 2 x-intercepts	$(-0.3,0)$ and $(-3.7,0)$ 2 x-intercepts	$None$ 0 x-intercepts
$None$ 0 x-intercepts	$(1.6,0)$ and $(4.4,0)$ 2 x-intercepts	$None$ 0 x-intercepts
$(-3,0)$ 1 x-intercept	$(-1.7,0)$ and $(1.7,0)$ 2 x-intercepts	$(-2,0)$ 1 x-intercept