

BUILDING QUADRATIC FUNCTIONS

- Given the coordinates of the vertex and the value of "c".
 - graph opens up, vertex (3, 2), $c = 4$
 - graph opens down, vertex (-5, -3), $c = 1/4$
 - graph opens to the right, vertex (-2, 7), $c = 3/4$
 - graph opens to the left, vertex (4, -3), $c = 6$
- Given the coordinates of the vertex and of the focal point.
 - vertex (3, 5), focal point (5, 5)
 - vertex (-3, 7), focal point (-11, 7)
 - vertex (4, -6), focal point (4, -11)
 - vertex (-3, -4), focal point (-3, 0)
- Given the coordinates of the vertex and the equation of the directrix
 - vertex (2, 3), $x = 6$
 - vertex (-4, 5), $x = -5$
 - vertex (6, 8), $y = 12$
 - vertex (-5, -2), $y = -6$
- Given the coordinates of the focal point and the equation of the directrix.
 - focal point (4, 6), $x = 8$
 - focal point (-3, 6), $x = -5$
 - focal point (6, -9), $y = -5$
 - focal point (-2, -4), $y = -8$
- Given the endpoints of the latus rectum
 - (-3, 7) and (-3, 9), opening left
 - (-6, 2) and (14, 2), opening down
- Given a point on the curve and the vertex
 - point (6, 7) and vertex (14, -5), opening left
 - point (-6, -5) and vertex (6, 4), opening down