Quadratic Functions Vocabulary

Quadratic Function is a polynomial function with the highest degree of 2 for the variable x. It can be written in the form $y = ax^2 + bx + c$.

Parabola is the graph of a quadratic function.

x-intercepts are the x-values where the parabola intersects the x-axis.

y-intercept is the y-value where the parabola intersects the y-axis.

Vertex of a parabola is the highest or the lowest point on the graph.

Axis of Symmetry is the vertical line that passes through the vertex and divides the parabola into two mirror images.

Standard form of a quadratic function: $y = ax^2 + bx + c$

Intercept form of a quadratic function is y = a(x - p)(x - q); where p and q are the x-intercepts.

Vertex form of a quadratic function is y = a(x - h) + k; where (h, k) is the vertex of the parabola.

	x-intercepts:
(-1, 9) 9	y-intercept:
$y = -x^2 - 2x + 8 $ 7 7	Vertex:
6	Axis of Symmetry:
4 3	Standard form:
	Intercept form:
$-8 -7 -6 -5 -4 -3 -2 -1 \circ 1 2 3 4$	Vertex form:
-2	