Characteristic	Explanation	How to find it...
Domain	X Values	X axis L → R $(-\infty, \infty)$
Range	y values	y axis B → T (y, ∞) $(-\infty, y)$
Vertex (h, k)	* highest / lowest pt * Middle point	
Axis of symmetry	A vertical line that cuts the parabola in half @ the vertex	X value of vertex X = ____
x-intercept $(x, 0)$	where the parabola crosses the x axis	Look @ graph: $y = 0$; x axis Also called: roots solutions zeros (2)
y-intercept $(0, y)$	where the parabola crosses the y axis	Look @ graph: $x = 0$ y axis (1)
Interval of increase X values	What part of my parabola has a POSITIVE SLOPE?	(X value of V, ∞) (−∞, X value V)
Interval of decrease	What part of my parabola has a NEGATIVE SLOPE?	(−∞, X value of x) (X value of V, ∞)
Maximum	* highest point	y value of V. y = ____
Minimum	* lowest point	y value of V. y = ____
End behavior	$x \to \infty$ $f(x) \to$ ____ $x \to -\infty$ $f(x) \to$ ____	∞ ∞ $x \to -\infty$ $x \to \infty$ $x \to -\infty$ $x \to \infty$ −∞ −∞
Average rate of change SLOPE	$\frac{y_2 - y_1}{x_2 - x_1}$	# < X < # [#, #] X values ① Graph → pts ② Substitute