Key Features of Parabolas Lab Sheet (To use with Problem 2.4A)

Using Desmos, create 6 graphs for the following equations. Complete the table below with information for each graph. While in Desmos, you can hover your cursor over points to find the coordinates! Are you are beginning to notice any patterns between the equations and some of these key features of the parabolas? Use what you have figured out here to answer the questions in 2.4B.

Graph Number	1	2	3	4	5	6
Equation in Factored Form	$y = x(x - 6)$					$y = (3 - x)(2 + x)$
Equation in Expanded Form		$y = 16 - x^2$	$y = x^2 + 6x + 9$	$y = x^2 + 9x + 20$	$y = x^2 + 5x - 14$	
Coordinates of x- intercept(s)						
Coordinates of y- intercept						
Equation for line of symmetry						
Coordinates of vertex (maximum or minimum point)						
Opens up or down						