Pre-Calculus 11 Chapter 3 Question Types Name:_____

Type	Section	Description	✓, ✗, or ○
A	3.2	Analyze quadratic functions of the form $y = ax^2 + bx + c$ to identify characteristics of the corresponding graph, including: • vertex • domain and range • direction of opening • axis of symmetry • x- and y-intercepts	
B	6.2	Sketch the graph of $y = x^2 + q$, using transformations, and identify the vertex and x-intercepts.	
C	6.3	Sketch the graph of $y = (x - p)^2$, using transformations, and identify the vertex and axis of symmetry.	
D	6.4	Sketch the graph of $y = ax^2$, using transformations, and identify the vertex and direction of opening.	
E	6.5	Sketch the graph of $y = a(x - p)^2 + q$, using transformations, and identify the vertex, domain and range, direction of opening, axis of symmetry and x- and y-intercepts.	
F	3.1	Write a quadratic function in the form $y = a(x - p)^2 + q$ for a given graph or a set of characteristics of a graph.	
G	3.3	Write a quadratic function given in the form $y = ax^2 + bx + c$ as a quadratic function in the form $y = a(x - p)^2 + q$ by completing the square.	
H	3.3	Determine the maximum or minimum value of a quadratic function in the form $y = a(x - p)^2 + q$ or $y = ax^2 + bx + c$ and the value for which it occurs.	
I	3.3	Write a quadratic function that models a given situation, then complete the square to solve the problem.	

Note: ✓= correct ✗=incorrect ○=did not attempt