Name:_____ Date:_____

HW: Transformations of Quadratic Functions Day 1

Part A: Writing an equation from a description

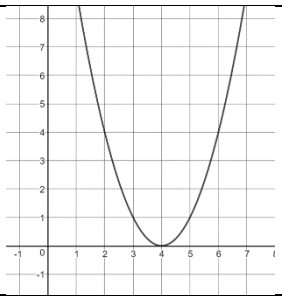
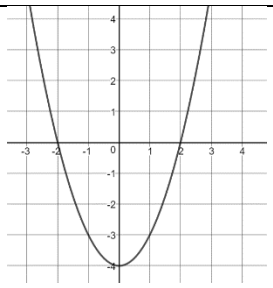
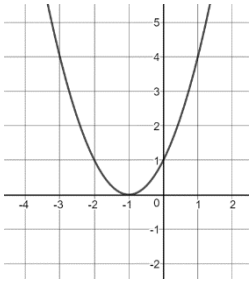
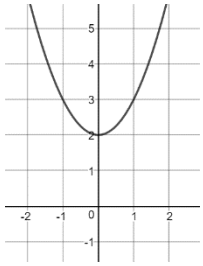
For each of the following, write down the equation for a quadratic function based on the description

1) A quadratic function that is shifted 4 units left	2) A quadratic function that is shifted 6 units down	3) A quadratic function that is reflected over the x-axis
4) A quadratic function that has moved 2 units left and one unit down	5) A quadratic function that has moved 3 units right	6) A quadratic function that has moved 7 units up
7) A quadratic function that has moved 4 units right and 3 units up	8) A quadratic function that has moved left 4 units and has been reflected over the x-axis	9) A quadratic function that has moved down 4 units and has been reflected over the x-axis

Part B:

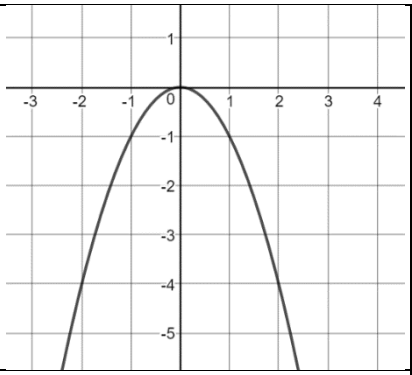
a) **Describe how each of the following graphs has changed from the parent function $f(x) = x^2$**

b) **Write the function of the graph**

10a) b) 	11a) b) 
12a) b) 	13a) b) 

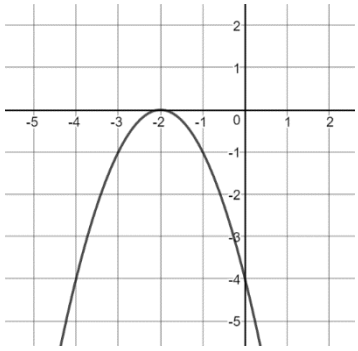
FLIP TO BACK!

14a)



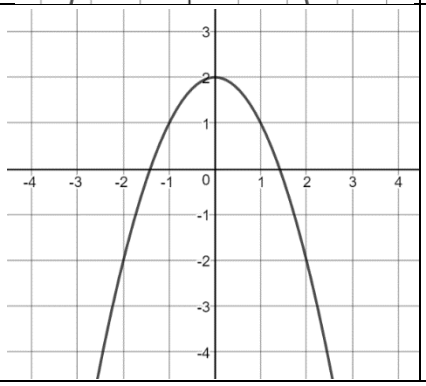
b)

15a)



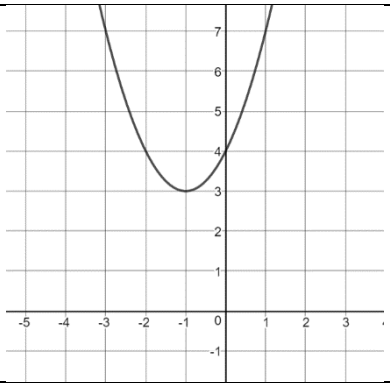
b)

16a)



b)

17a)



b)