Day 1 – Quadratic Transformations (h & k)

Practice Assignment

Name: _____

Date: _____ **Block:** _____

1. Match each equation with its graph, vertex, and description of its transformations by placing the appropriate letter on each line:

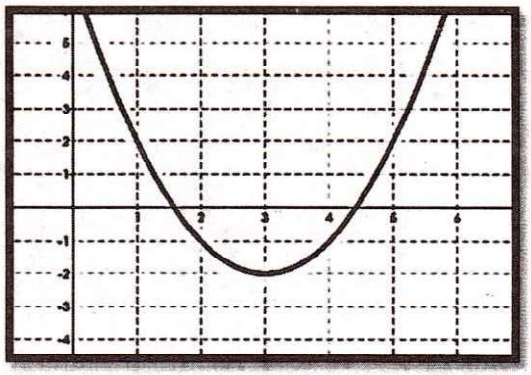
Equations:	A. $y = (x + 3)^2 - 2$	B. $y = (x - 3)^2 - 2$	C. $y = (x - 3)^2 + 2$	D. $y = (x + 3)^2 + 2$
Vertex:	_____	_____	_____	_____
Transformations:	_____	_____	_____	_____
Graphs:	_____	_____	_____	_____

Answer Bank:

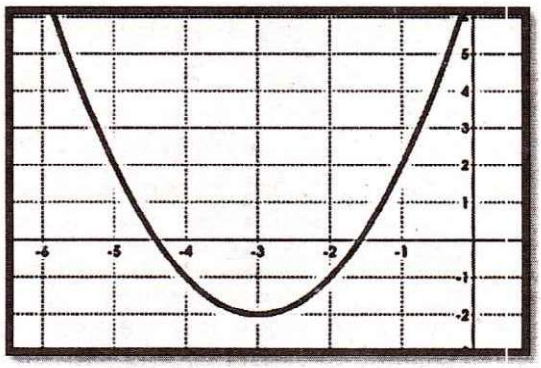
A. (-3, 2) B. Left 3, down 2 C. (3, -2) D. Right 3, down 2

E. (3, 2) F. Right 3, up 2 G. (-3, -2) H. Left 3, up 2

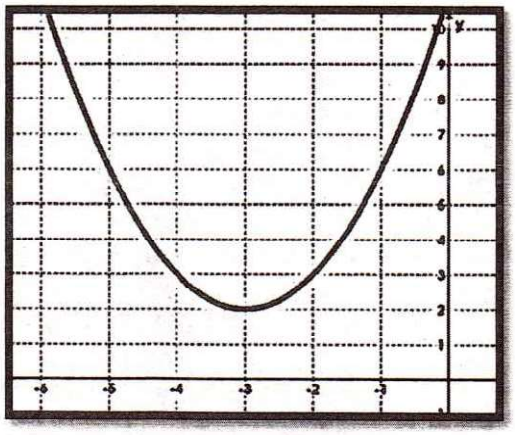
I. Graph 1



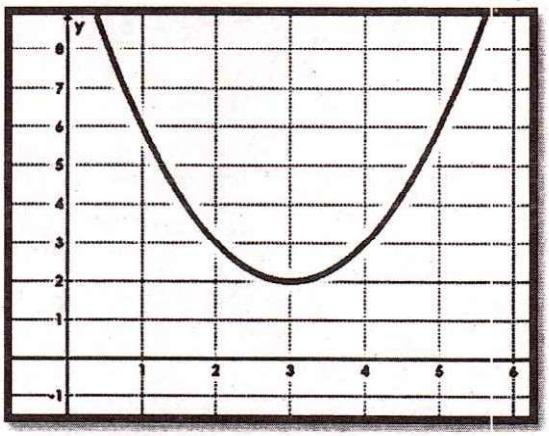
J. Graph 2



K. Graph 3



L. Graph 4



2. Given each equation, name the vertex and describe the transformations.

a. $y = (x - 5)^2 + 4$

b. $y = (x + 1)^2 - 6$

c. $y = x^2 - 7$

d. $y = (x + 2)^2$

3. Create an equation that represents each transformation.

a. Shifted down 6 units and left 4 units

b. Shifted right 8 units and up 5 units

c. Shifted left 1 units

d. Shifted down 10 units

4. Name the vertex from the given transformations.

a. Shifted left 3 units and down 4 units

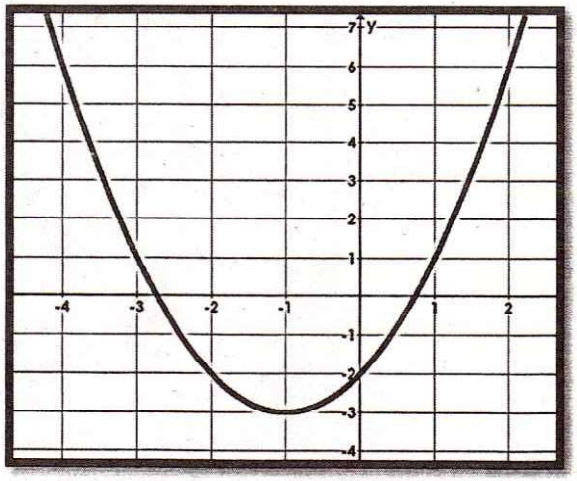
b. Shifted up 9 units and right 2 units

c. Shifted up 7 units

d. Shifted right 4 units

5. Create an equation that represents each graph. Name the vertex.

a.



b.