

18 Questions Total

Date: _____ Hour: _____

Writing Quadratic Functions

Directions: Write a quadratic equation in vertex form for each function. Then match your equation to one of the options in the bank below, write the letter of that option on the line.

Option Bank

- A. $y = 3(x+2)^2 - 4$ B. $y = (x+1)^2 - 3$ C. $y = -2x^2 - 1$ D. $y = 2(x-1)^2 - 1$
 E. $y = -(x-2)^2 + 3$ F. $y = 4(x+3)^2 + 3$ G. $y = -\frac{1}{3}(x-1)^2 - 4$ H. $y = 2(x-2)^2 + 2$
 I. $y = 4(x-3)^2 - 2$ J. $y = (x-4)^2 - 2$ K. $y = -\frac{1}{2}(x-4)^2 - 3$ L. $y = 3(x-2)^2 - 4$
 M. $y = -(x+3)^2 + 1$ N. $y = x^2 - 3$ O. $y = -\frac{1}{3}(x-3)^2$ P. $y = \frac{1}{2}(x+2)^2 - 4$
 Q. $y = (x+2)^2 - 1$ R. $y = -(x+4)^2$

1. _____

x	y
1	-2
2	-0.5
3	0
4	-0.5



3. _____
Write an equation based on these transformations from $y = x^2$:

Translated right 4 and down 2

4. _____
Write an equation based on these transformations from $y = x^2$:

Stretched by 1/3, and



11. _____
Write an equation based on these transformations from $y = x^2$:

Shrunk by 1/2, Translated left 2 and down 4

16. _____
Write an equation based on these transformations from $y = x^2$:

Stretched by 4, Translated left 3 up 3

2 Pages!

6. _____

x	1	2	3	4	5
y	-1	-4	-1	8	23

