

Name: _____

Per: _____

POINTS: _____

Homework #18 Quiz

Be sure to include your work when appropriate.**describe the transformation of the quadratic parent function, $f(x) = x^2$, that will result in the graph of the quadratic function given.**

1. $g(x) = (4x - 7)^2$

2. $g(x) = -3(x + 2)^2 + 6$

3. The graph of $g(x)$ is produced by transforming the quadratic parent function, $f(x) = x^2$, by vertically stretching its graph by a factor of 3 and translating it 7.5 units upward. Determine the equation that represents $g(x)$.

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Identify the domain, range, x-intercept, y-intercept and vertex of each quadratic function. Write the domain and range in three different ways: as an inequality, interval, and in set builder notation.

4.

x	$f(x) = -(x + 1)^2 + 9$
-5	-7
-4	0
-3	5
-2	8
-1	9
0	8
1	5
2	0

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x	$g(x) = 2(x + 3)^2 - 5$
-5	3
-4	-3
-3	-5
-2	-3
-1	3
0	13
1	27

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