Name _____ Date _____

Quiz: Transformations with Functions

1 Write the equation for the graph of function g(x), obtained by shifting the graph of $f(x) = x^2$ two units left, stretching the graph vertically by a factor of five, reflecting that result over the x-axis, and then translating the graph up three units.

2 Describe the transformations that would produce the graph of the second function from the graph of the first function.
f(x)=x becomes g(x)= 3x+2

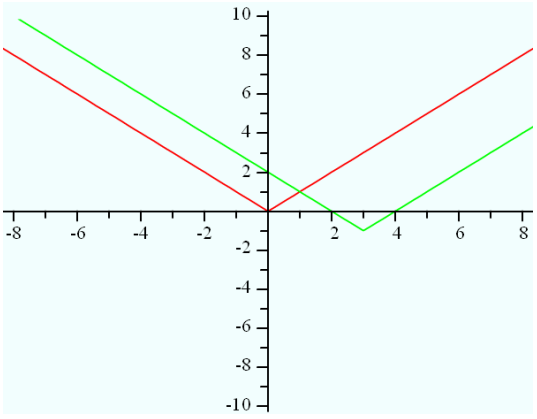
3 Given function $f(x)=x^2+1$, sketch the graphs of and describe the transformation :-f(x)

4 Determine if the functions f(x) and g(x) shown below are odd, even or neither: f(x)= |x|-3 and g(x) = -|x-3|

5 A function is defined as $f(x) = x^2-1$.Sketch the graph of f(x) and $f^{-1}(x)$ on the same axis and describe in transformational terms the relationship between these two graphs.

6 Let two functions $f(x)= x^3$ and $f(x)= 4x^3$. Graph both function On the same axes. Describe the relationship between these two graphs using transformational terms.

7 Consider relationship between Fahrenheit and Celsius temperatures. Graph these two functions on the same set of axes: y=x and y=(2/8)(x-2) Describe in transformational terms, how the first graph becomes the second graph.

8 

Write the equation for the graph shown at the right. Assume that the parent function was y=|x|

Circle # Correct	0	1	2	3	4	5	6	7	8	9	10
Percentage Score	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%