Greatest Integer Function Worksheet   Name _____Key_____

Evaluate the following:

(1) $[[7.1]] =$ _____7_____   (2) $[[1.8]] =$ _____1_____   (3) $[[\pi]] =$ _____3_____

(4) $[[-6.8]] =$ _____-7_____   (5) $[[-2.1]] =$ _____-3_____   (6) $[[0]] =$ _____0_____
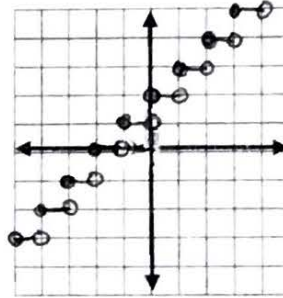

Translating Graphs of Greatest Integer Functions

Using what you learned about the translations of $y = a|b(x - h)| + k$, graph the following:

(7) $f(x) = [[x]] + 2$ $g(x) = [[x + 2]]$
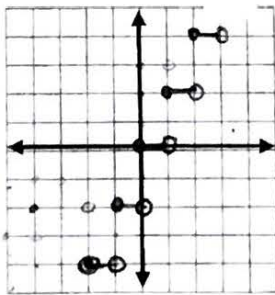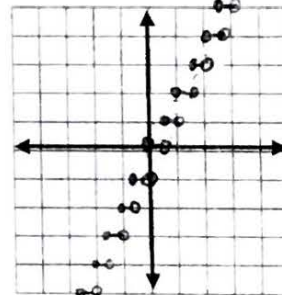

Explain the shift in each graph and how they differ. *In f(x) the y value were shifted up 2 units but in g(x) the x value were shifted to the left 2; however the result were the same*
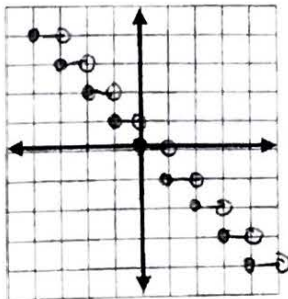
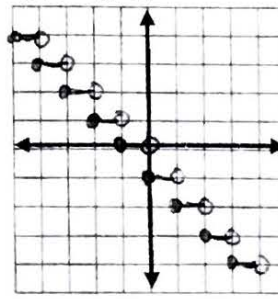(8) $f(x) = 2[[x]]$ $g(x) = [[2x]]$

Explain the dilation in each graph and how they differ. *The y value of f(x) were multiplied by 2 while the x values in g(x) were divided by 2.*

(9) $f(x) = -[[x]]$ $g(x) = [[-x]]$

Explain the reflection in these graphs and how they differ. *In f(x) the y value were rotated around the x-axis and in the g(x) the x values were rotated around y-axis; however the results look the same.*