

**Greatest Integer Function**

**The Greatest Integer Function** \_\_\_\_\_

$f(x) =$  \_\_\_\_\_

This function takes the input and finds the \_\_\_\_\_ closest to that number \_\_\_\_\_.

*Examples:*

*Answers*

*Examples:*

*Answers:*

1.  $[7.35] =$

3.  $[-2.5]$

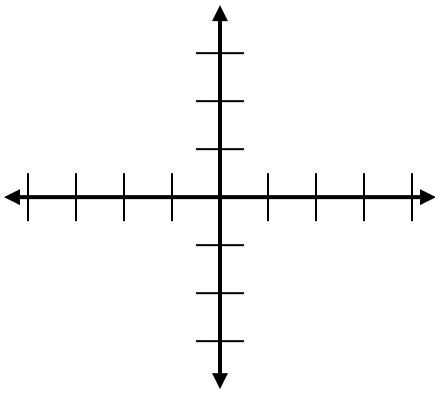
2.  $\left[\frac{4}{3}\right] =$

4.  $\left[-\frac{10}{5}\right]$

**Graphing the Greatest Integer Function**

The greatest integer function got its nickname, \_\_\_\_\_, from its graph.

$f(x) = [x]$



$x$	$f(x)$
-2.00	
-1.75	
-1.5	
-1.25	
-1.00	
-0.75	
-0.5	
-0.25	
0.00	
0.25	
0.5	
0.75	
1.00	
1.25	
1.5	

## Transformations of the Greatest Integer Function

Don't forget the transformations do not change!

Graphing Form: \_\_\_\_\_

So \_\_\_\_\_ is a starting point for your steps.

The length of your steps is \_\_\_\_\_.

The space between your steps (vertically) is \_\_\_\_\_.

If \_\_\_\_\_ is \_\_\_\_\_ the steps go \_\_\_\_\_

and if \_\_\_\_\_ is \_\_\_\_\_ then the steps

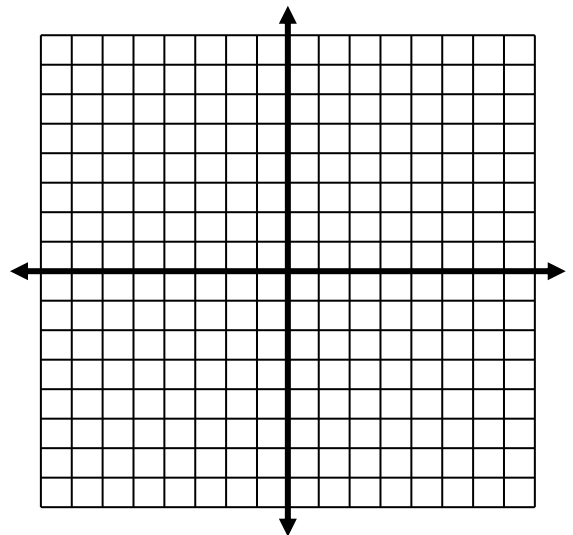
\_\_\_\_\_.

Example: Graph  $f(x) = 2\lceil x - 3 \rceil + 1$

Start \_\_\_\_\_

Step length \_\_\_\_\_

Step height \_\_\_\_\_



Example 2: Graph  $y = \lceil 2x + 4 \rceil - 5$

Get in graphing form! \_\_\_\_\_

Start \_\_\_\_\_

Step length \_\_\_\_\_

Step height \_\_\_\_\_

