

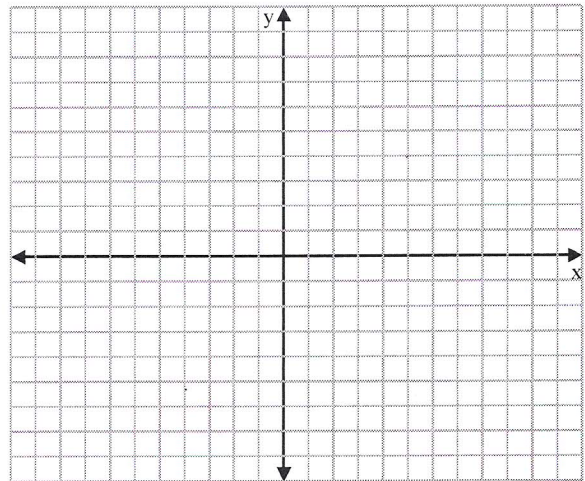
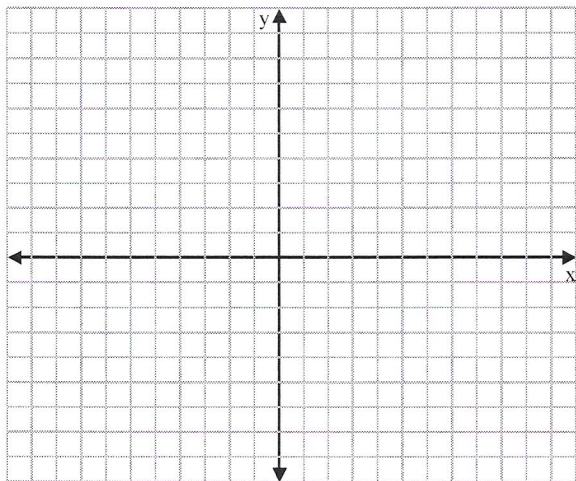
To graph a greatest integer function:

1. Write the function in standard form.
2. Locate the starting point. Put a solid dot.
3. Draw the step (length is $|\frac{1}{b}|$) to the left ($b < 0$) or to the right ($b > 0$).
4. Draw the "staircase". Distance between steps is $|a|$.
If $ab > 0$, steps go up to the right, if $ab < 0$, steps go down to the right.

Examples: Graph the functions on the grid supplied.

1. $f(x) = -2 [x - 3] + 1$

2. $f(x) = 3 [-0.5x + 2] - 1$



To write the function given the graph:

There are many functions that can describe the same graph, depending on the "starting point" of the function. As a guideline, take the first solid dot in the first quadrant.

1. Choose the starting point (h, k)
2. Find the length of a step to calculate b : $b = \pm \frac{1}{\text{length of a step}}$
 b is negative if the solid dot is on the right of the step.
3. Find the distance between the steps to determine a .
To find the sign of a : slope is positive, then ab must be positive.
slope is negative, then ab must be negative.

Examples: Determine the function for each of the graphs shown below.

