

Part I. Carefully graph each of the following. Identify whether or not the graph is a function. Then, evaluate the graph at any specified domain value.

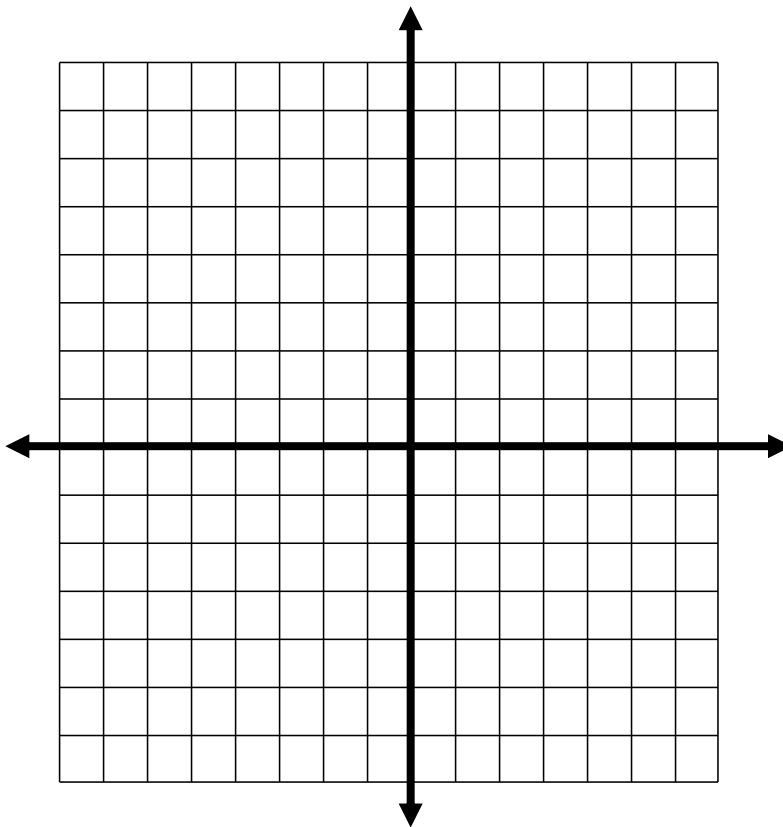
1.
$$f(x) = \begin{cases} x+5 & x < -2 \\ -2x-1 & x \geq -2 \end{cases}$$

Function? Yes or No

$f(3) =$

$f(-4) =$

$f(-2) =$



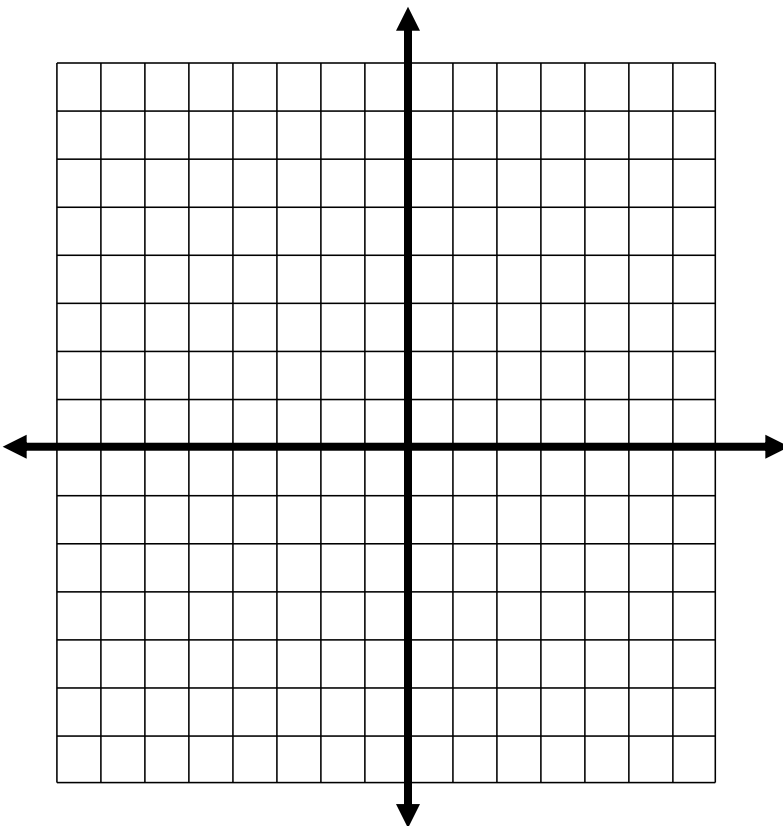
2.
$$f(x) = \begin{cases} 2x+1 & x \geq 1 \\ \frac{x}{2}-3 & x < 1 \end{cases}$$

Function? Yes or No

$f(-2) =$

$f(6) =$

$f(1) =$



Worksheet Piecewise Functions
Algebra 2 Homework

Name: _____

Date: _____

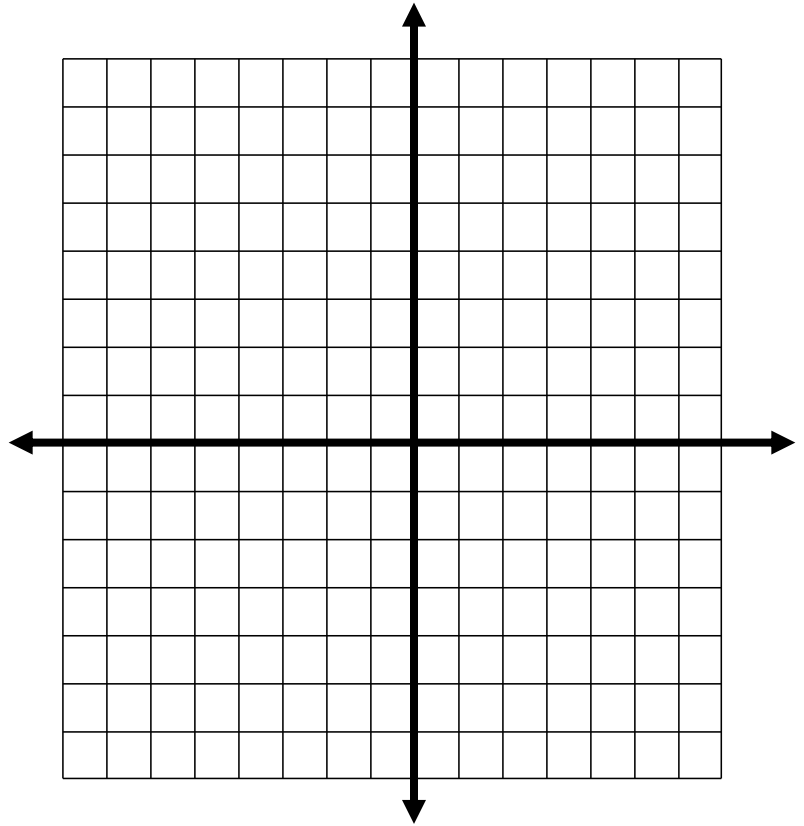
3.
$$f(x) = \begin{cases} 4x - 2 & x \geq 2 \\ -\frac{x}{3} + 4 & x < 2 \end{cases}$$

Function? Yes or No

$f(-4) =$

$f(8) =$

$f(2) =$



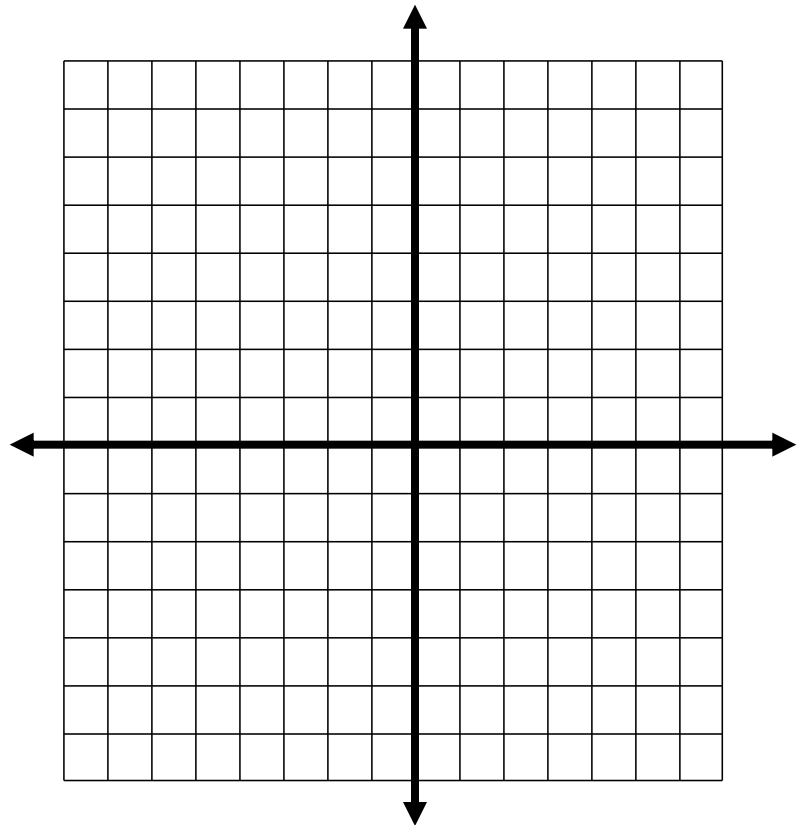
4.
$$\begin{cases} -x + 4 & x \leq 0 \\ \frac{2x}{3} - 1 & 0 < x \leq 5 \\ 2 & x > 5 \end{cases}$$

Function? Yes or No

$f(-2) =$

$f(0) =$

$f(5) =$



Worksheet Piecewise Functions
Algebra 2 Homework

Name: _____

Date: _____

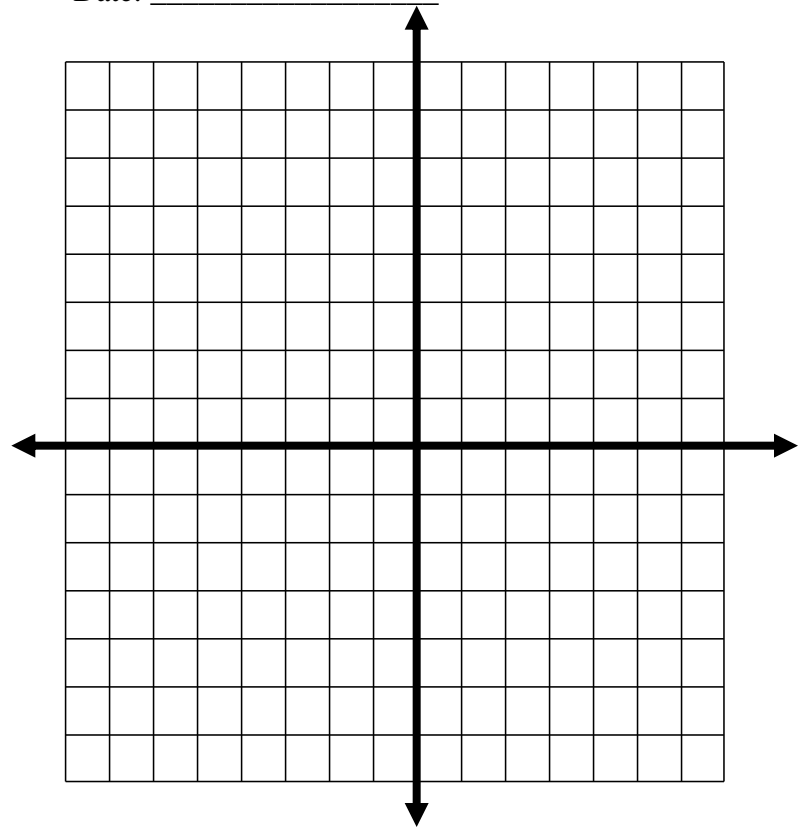
5.
$$f(x) = \begin{cases} -x+1 & x \leq 0 \\ -\frac{4x}{3}-4 & x > 0 \end{cases}$$

Function? Yes or No

$f(-4) =$

$f(0) =$

$f(3) =$



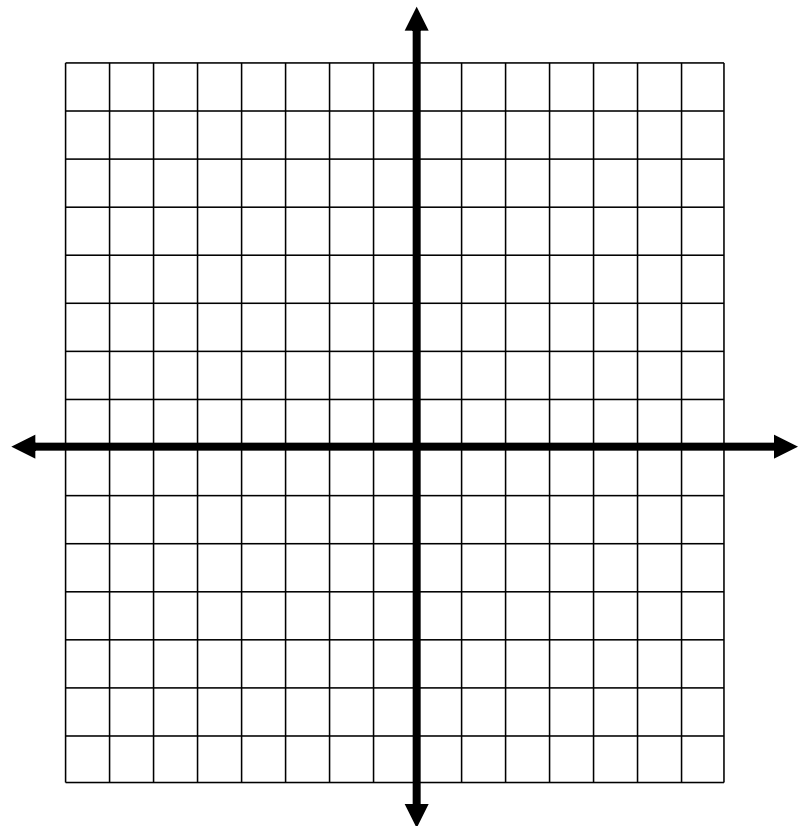
6.
$$f(x) = \begin{cases} -3 & x \leq 3 \\ 2x-5 & x > 3 \end{cases}$$

Function? Yes or No

$f(-4) =$

$f(0) =$

$f(3) =$



Worksheet Piecewise Functions
Algebra 2 Homework

Name: _____

Date: _____

Part II. Write equations for the piecewise functions whose graphs are shown below. Assume that the units are 1 for every tic marc.

