Question 1: Evaluate the following function

$$f(x) \begin{pmatrix} 7x - 13, & if -6 > x \\ -3x + 8, & if -6 \le x < 7 \\ \frac{1}{4}x + 9, & if 7 \le x \end{pmatrix}$$

f(3)

f(-9)

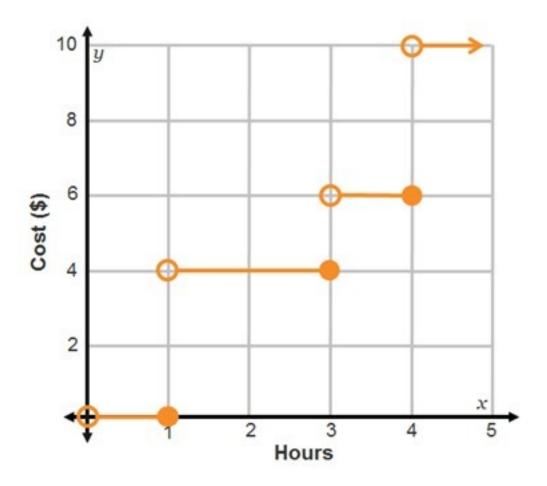
f(7)

f(13)

f(-2)

Create the function that defines the following step function graph:

Hint: Your answer should be a piecewise function.

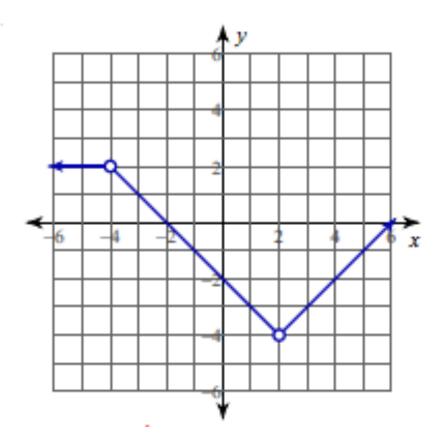


Graph the following STEP function.

$$f(x) = \begin{cases} -3; & x < -2 \\ 0; & -2 \le x \le 1 \\ 3; & x > 1 \end{cases}$$

Create the function that defines the following piecewise graph:

Hint: Your answer should be a piecewise function.



Evaluate the following function:

$$f(t) = \begin{cases} -4\\25\\16\\10 \end{cases}$$

if
$$t < 6$$

if $6 \le t < 8$
if $8 \le t < 30$
if $t \ge 30$

f(18)

f(6)

f(43)

f(0)

f(8)

f(30)

f(-19)

 $f(\frac{41}{5})$

Graph the following piecewise function.

$$f(x) = \begin{cases} x + 3, & x \le 0 \\ 3, & 0 < x \le 2 \\ 2x - 1, & x > 2 \end{cases}$$