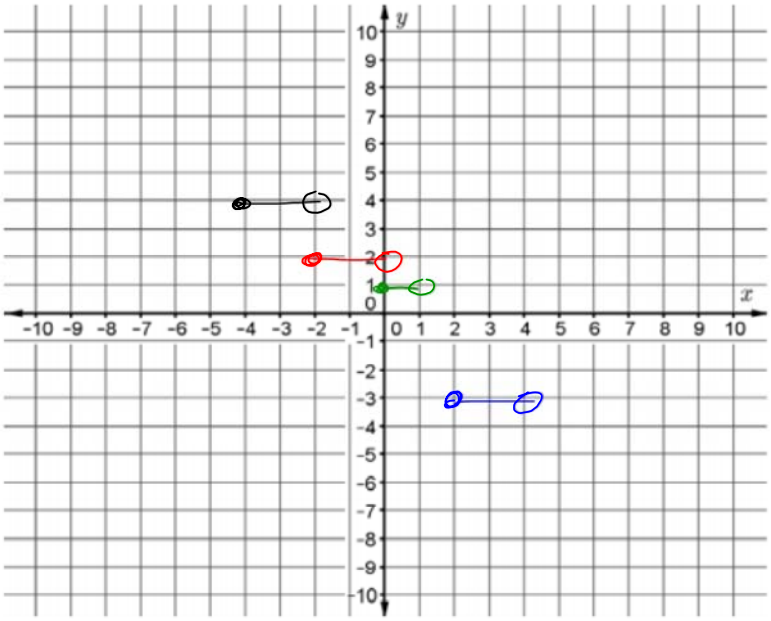
Good Afternoon!

Please put up your phones, grab a half sheet of paper and workbook from the front, and take your seats.
Work on graphing the half sheet. We will go over it shortly.

Warm-up

Graph the function $f(x) = \begin{cases} 4, if\ -4 \le x < -2 \\ 2, if\ -2 \le x < 0 \\ 1, if\ 0 \le x < 1 \\ -3, if\ 2 \le x < 4 \end{cases}$



$f(-3) = 4$

$f(-2) = 2$

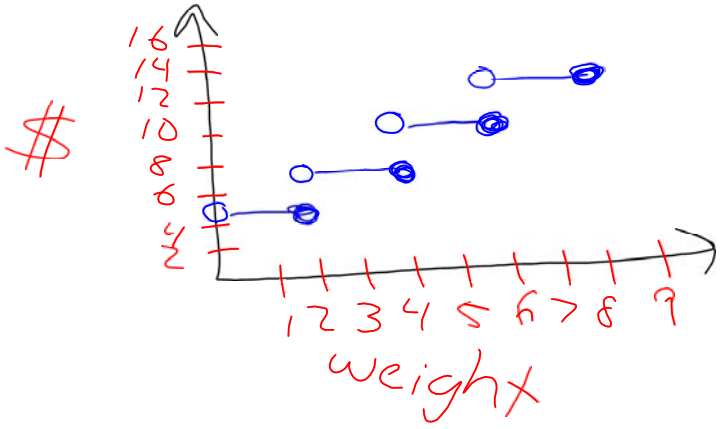
$f(0) = 1$

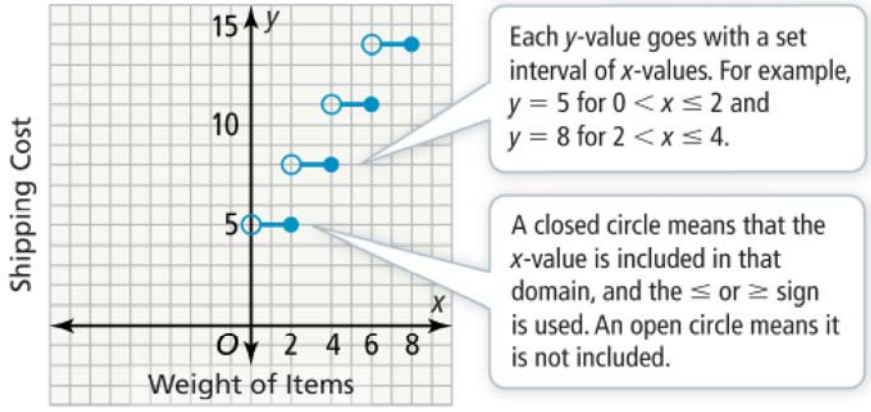
$f(8) = DNE$

Step Functions

The shipping cost of items purchased from an online store is dependent on the weight of the items. The table below represents shipping costs y based on the weight x. Graph the function. What are the domain and range of the function? What are the maximum and minimum values?

Weight of Items	$0 < x \leq 2$ lb	$2 < x \leq 4$ lb	$4 < x \leq 6$ lb	$6 < x \leq 8$ lb
Shipping Cost	$5	$8	$11	$14

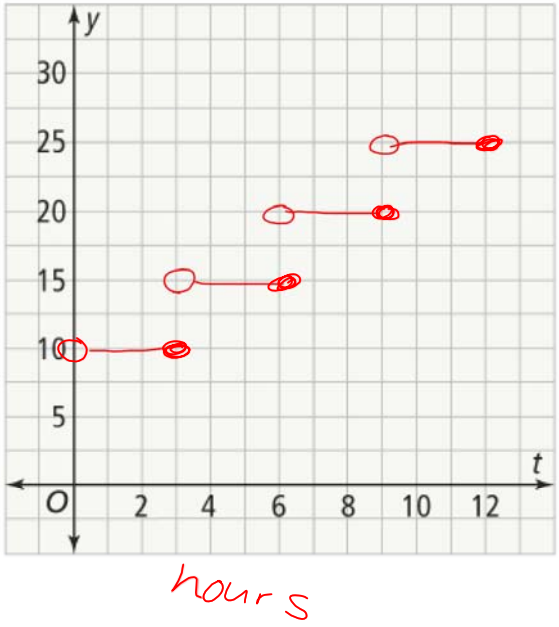




Domain: $\{x \mid 0 < x \leq 8\}$
Range: $\{5,\ 8,\ 11,\ 14\}$

The table below represents fees for a parking lot. Graph the function. What are the domain and range of the function? What are the maximum and minimum values?

Time	$0 < t \leq 3$h	$3 < t \leq 6$h	$6 < t \leq 9$h	$9 < t \leq 12$h
Cost	$10	$15	$20	$25



Remember Ponies in the Frame?

Parking Garage

A parking garage charges customers $7.50 per hour or any fraction thereof.

a) Draw a graph that represents this situation.

b) How much would it cost to park for 3 hours?

c) How much would it cost to park for 4 and a half hours?

d) How much would it cost to park for 7 hours and 15 minutes?

Jet Skis!

Renting jet skis in the Bahamas cost $40 per hour (or part of an hour) plus a $15 gas fee.

a) Create a function that models the cost in terms of the number of hours the jet ski was rented.

b) How much would it cost to rent for 3 hours?

c) How much would it cost to rent for 4 hours and 45 minutes?

Practice

Student Companion Workbook pg. 12