

## Linear Functions: Cell Phones and International Roaming

The base cost of your monthly cell phone bill is \$80 month. Because of international travel, you have the international roaming option turned on. This means that for each day you activate your phone on an international network, an additional \$10 is added to your bill. Let  $C(x)$  monthly cell phone bill where  $x$  is\ the number of days during the month that international roaming was used.

Complete the table below and sketch a graph of  $C(x)$ .

$x$	$C(x)$
0	
1	
2	
3	
4	
5	

Compute the average rate of change over any time interval and write what it means in words.

Write a formula for  $C(x)$ .

If your monthly bill was \$210, how many days were you using international roaming?

What is the domain of this function (the possible values of  $x$ )?

What is the least your cell phone could be in a month?

What is the most your cell phone could be in a month?