

Consider the following problem.

ChitChat, a cell phone service provider, has no monthly fee for cell phone service, but they do charge \$0.45 per minute for usage. You would like to know what your monthly bill will cost depending on how many minutes you talk. Suppose  $c$  is the cost for  $m$  minutes used, then find the relationship (equation) for  $c$  and  $m$  (assume  $m$  is the independent variable and  $c$  depends on  $m$ ). Graph this function.

Can you determine how much your bill would be if you talk 432 minutes one month?

Can you determine how many minutes you've used if your bill was \$146.25?

How would your graph change if cost per minute changed?

You can go to this link

<http://www.nctm.org/standards/content.aspx?id=26883>

and see some extended activities from this problem.