## Word Problems for Linear Graphs

1. A travel company is printing brochures. The printing will cost $\$ 5$ to design the brochure, and then $\$ 1.50$ for each brochure that they print.
a) Write an equation for the cost $(C)$ related to the number of brochures printed ( $n$ )
b) Create a table of values, then plot the graph of the cost and the number of brochures.
(HINT: Which should go on the $y$-axis and $x$-axis?)


c) Using the graph, find the cost for 13 brochures. Compare your result to when you use your equation to calculate.
d) Using the graph, find how many brochures were printed if the company was charged $\$ 18.50$
2. Telus offers two mobile phone plans. Each has unlimited calling, but different rates for data.

Plan A: $\$ 40 /$ month plus $\$ 10$ per GB of data
Plan B: $\$ 70 /$ month plus $\$ 5$ per GB of data
a) Write an equation for the monthly cost $(C)$ for Plan A and Plan B related to the amount data used (d).
b) Create tables of values, then plot the cost and the amount of data for both plans (include labels!)


Plan B


c) Sally is trying to decide on which plan to choose. She looks at her data usage history and she uses about 7 GB each month. Which plan should she choose?
d) Sidney looks at her data usage and says that either plan would cost the same for her. How much data does she use each month?
e) Which plan should you choose based on your data usage?

