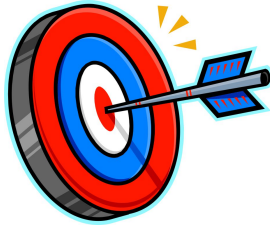


UNIT 2: Graphing Linear Relations

Linear Relations Applications Continued...

Learning Goal:

I will learn how to solve real life examples of linear relations.



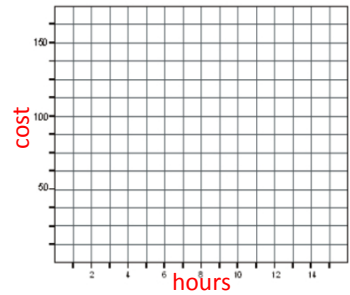
Ex. 3 Marcus is just learning how to snowboard. White Mountain charges \$10/hour for lessons and \$40 for the lift ticket and snowboard rental.

- a) What is the dependent variable? **cost**
What is the independent variable? **hours**



- b) Make a table of values for up to 6 hours and graph the relationship.

hours (x)	cost (y)
0	40
1	50
2	60
3	70
4	80
5	90
6	100



- c) Write an equation to model the relationship, where C is the cost and n is the number of hours.
- d) Does this represent a partial or direct variation? Explain.
- e) How much will it cost in total for Marcus to take 2.5 hours of lessons? Show your work.
- f) If Marcus paid \$75, how long was he at White Mountain getting lessons? Show your work.

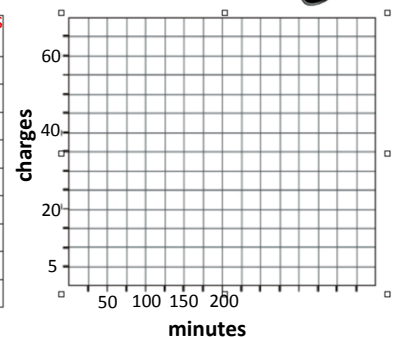
Ex. 4 A cell phone service provider charges \$19.00 per month plus \$0.25 per minute of use.

- a) What is the dependent variable? **charges**
What is the independent variable? **minutes**



- b) Make a table of values for up to 200 minutes and graph the relationship.

minutes (x)	charges (y)
0	19
25	25.25
50	31.50
75	37.75
100	44
125	50.25
150	56.50
175	62.75
200	69



c) Write an equation to model this situation for one month's bill, where C is the cost and n is the number of minutes.

d) Does this represent a partial or direct variation? Explain.

e) How much would it cost to talk for 250 minutes per month?

f) How many minutes were used if the bill was \$72.25?

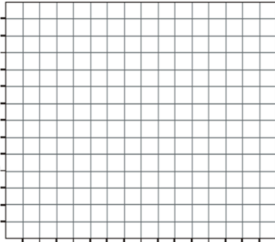
1. A tanning salon offers a by-the-minute package which costs \$0.35 per minute.

a. What is the dependent variable?

What is the independent variable?

b. Make a table of values for up to 100 minutes and graph the relationship.

0	
20	
50	
100	



c. Does this represent a partial or indirect representation? Explain.

d. Write an equation to model this situation (remember to define your variables!).

e. If you had a budget of \$20 per month for tanning, how many minutes could you tan?

