MAP 4CI Unit 5	lesson 2
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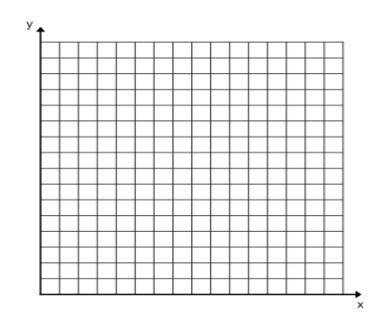
5.1 LINEAR MODELS

Rate of change____

 $Ex. 1 \ \ Danika \ drove \ at \ a \ constant \ speed \ from \ Peterborough \ to \ Ottawa.$

The table shows the distance she travelled over time.

Time (h)	Distance	Rate of Change
	(km)	
0.0	0	
0.0		
0.5	42	
0.5	72	
1.0	84	
1.0		
1.5	126	
2.0	168	
2.5	210	
3.0	252	
3.5	294	



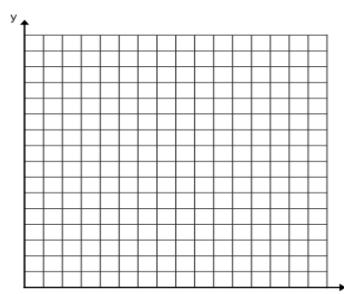
- a) Draw a graph of the data. Describe the shape of the graph.
- b) Does the rate of change appear to be increasing, constant, or decreasing?
- c) Determine the rate of change. Include appropriate units.

Ex. 2 Linear Regression

The table shows how the mass of a liquid is related to its volume.

- a) Use a desmos to graph the data
- b) Use desmos to determine the equation of the line of best fit.

Volume (mL)	Mass (g)
0	90
25	110
50	129
75	148
100	168
125	188
150	207



Ex.3 Complete Pg 277 # 6 using desmos

Practice: Pg 278 # 8, 9, 11 Pg. 275 # 1-5, 7