

Show all work on this sheet, including mental steps in a clearly organized way that speaks for itself. Use proper mathematical syntax/notation.

- (1) The monthly cost of driving a car depends on the number of miles driven. Lynn found that in May it cost her \$380 to drive 480 mi and in June it cost her \$460 to drive 800 mi.
- (b) Express the monthly cost C as a function of the distance driven d , assuming that a linear relationship gives a suitable model, BUT FIRST
- (a) Make a completely labeled rough graph indicating the data points and the graph of the linear relationship. (to help you in part (b)).
- (c) What does the slope of the linear function graph represent, in words?
- (d) What does the "y-intercept" represent?
- (e) Use part (b) to predict the cost of driving 1500 mi per month.