

Problem 3

Name: _____

- ① Search craigslist for a popular car type (e.g. Honda Civic). Randomly sample 16 vehicles from those listed (you may want to refine your search to a particular model or type of seller). Record the asking price, the mileage, and the age for each vehicle.
- (a) Find a linear model for the cost as a function of the mileage. Remark on the rate of depreciation (including units).
 - (b) Find a linear model for the cost as a function of the age. Remark on the rate of depreciation (including units).
 - (c) Comment on which model seems to be a better predictor of cost (the one tied to age or the one based on mileage) - explain.
 - (d) Find an exponential model for the cost as a function of the mileage. Remark on the rate of depreciation (including units).
 - (e) Find an exponential model for the cost as a function of the age. Remark on the rate of depreciation (including units).
 - (f) Comment on which model seems to be a better predictor of cost (the one tied to age or the one based on mileage) - explain.
 - (g) Comment on which of the two models identified in parts ?? and ?? seems to be a better predictor of cost - explain.