

name: Solution

1 (10 points). For each of the following scenarios, classify each of the pair of variables as explanatory or response or neither. Justify your answer.

- (a) Whether a person likes to sing and whether a person likes to dance.
- (b) The number of pages in a textbook and the cost of a new copy of the textbook.
- (c) The number of alcoholic drinks consumed and the blood alcohol content.

- a) Neither. There is no causal influence being passed between one's enjoyment of singing & dancing
- b) The number of pages (explanatory) raises the cost (response) as the production cost increases. Though a case can be made for "neither"
- c) The number of alcoholic drinks (explanatory) certainly causes your BAC (response) to rise.