

Participation 3

Name:

Date:

1. Refer to Example 2 of section 4.2 and answer the following questions.

(a) If the member selected likes hamburgers, what is the probability that they like tacos

(b) If the member selected likes tacos, what is the probability that they like hamburgers?

2. According to a recent survey, 70 percent of the population is religious. If the person is religious there is a 80 percent chance that they own a dog. If the person is not religious there is a 60 percent chance that they own a dog. If you randomly select a person,

(a) Draw a tree diagram

(b) What is the probability that they own a dog

- (c) What is the probability that they Do NOT own a dog
- (d) If the person selected owns a dog, what is the probability that they are religious.
- (e) If the person selected does NOT own a dog, what is the probability that they are religious.