

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.