

Name: _____

Conditional Probability

Exercise 1: In Dubai, 48% of all teenagers own a skateboard and 39% of all teenagers own a skateboard and roller blades. What is the probability that a teenager owns roller blades given that the teenager owns a skateboard?

Exercise 2: At a middle school, 18% of all students play football and basketball and 32% of all students play football. What is the probability that a student plays basketball given that the student plays football?

Exercise 3: In the United States, 56% of all children get an allowance and 41% of all children get an allowance and do household chores. What is the probability that a child does household chores given that the child gets an allowance?

Exercise 4: In Europe, 88% of all households have a television. 51% of all households have a television and a DVD. What is the probability that a household has a DVD given that it has a television?

Exercise 5: In New England, 84% of the houses have a garage and 65% of the houses have a garage and a back yard. What is the probability that a house has a backyard given that it has a garage?

Exercise 6: A business employs 600 men and 400 women. Five percent of the men and 10% of the women have been working there for more than 20 years. If an employee is selected by chance, what is the probability that the employee is male, given that the length of employment is more than 20 years?