

Name: \_\_\_\_\_ Math 130 Day 5 In Class Worksheet

Date: \_\_\_\_\_ Probability of ORs / Conditional Probabilities

1. A jar contains 50 jelly beans in total. 20 of them are red, 15 are green and the other 15 are blue. If a jelly bean is selected at random from the jar, what is the probability that it is red or blue?

2. “Greg’s Donut Shop” and “Donuts R Us” are the only donut shops in town that make your favorite type of glazed donut. Because the glazed donuts are in such demand, these donut shops usually run out of these donuts pretty quickly. Suppose you have a craving for a glazed donut and are willing to drive to both donut shops, if necessary, to get one. If the probability that “Greg’s Donut Shop” will still have some glazed donuts for sale is 28%, the probability that “Donuts R Us” will still have some glazed donuts for sale is 15%, and the probability that both donut shops will have glazed donuts for sale is 4%, what is the probability that you will be able to get a glazed donut?

3. A jar contains 50 jelly beans in total. 20 of them are red, 15 are green and the other 15 are blue. If a jelly bean is selected at random from the jar, and before you look at it you are told that it is not green, what is the probability that it is red?

4. A bag contains all whole numbers from 1 to 20 in it. Suppose 2 numbers are going to be selected from the bag one at a time without replacement. Suppose the first number is drawn and it's an even number. What is the probability that the second number is even?