

Spring 2017 COT 3100 Section 2 Quiz #3

Name: _____

Lab Section: 17 18 19 20 21 22 24

1) (5 pts) How many integers in between 1 and 3000, inclusive are divisible by either 5 or 7?

2) (5 pts) How many permutations of the letters in CHICKENBURRITO contain no consecutive vowels?

3) (5 pts) Sally is making a gift basket. She wants it to contain 4 bars of soap and 5 containers of lotion. She wants each of the items in the gift basket to be different (so two of one type of bar of soap are not allowed). If she can choose from 15 different types of bars of soap and 20 different types of lotion, how many different gift baskets could she make?

4) (10 pts) Alia loves Taco Bell! She would like to buy 15 items from Taco Bell for all of her roommates. Based on their preferences she must choose from the following 6 menu items: Beef Taco, Chicken Taco, Beef Burrito, Seven Layer Burrito, Mexican Pizza and Crunch Wrap Supreme. In addition, she must buy at least 2 Chicken Tacos and when she arrives at the Taco Bell they tell her that they only have ingredients to make at most 4 Seven Layer Burritos. How many different orders can Alia make, based on these restrictions?
