

Problem 1

Statistics Quiz 11.1 – 11.4

Name:

Date:

Period:

1.1

1. Alicia, Bob and Carol are entered in a race. If there are no ties, write all the possible orders in which they can finish the race.

Student: type response here

1.2

2a. A store owner has received a shipment of lamps in 7 new styles. In how many different ways can the owner display 3 of the new styles on a shelf? This is a ...

- Permutation
- Combination

1.3

2b. A store owner has received a shipment of lamps in 7 new styles. In how many different ways can the owner display 3 of the new styles on a shelf?

Student: type response here

1.4

3. The coach of the Yale Rowing Club has to determine positions for his 8-person scull team. How many different positions are possible?

Student: type response here

1.5

4. How many ways can 7 classes be scheduled in a 7-period day?

Student: type response here

1.6

5. From a standard deck of 52 cards, with each card being different. How many 5-card hands are possible?

Student: type response here

1.7

6. In how many ways can a 6-person neighborhood night watch be selected from 12 men and 8 women who are on the safety patrol?

Student: type response here

1.8

7a. The dirty clothes hamper contains four black socks, a blue shirt, a red shirt, a green dress, an orange sweater, and six blue jeans. You remove the following from the clothes hamper.
 $P(\text{Black Sock})$

Student: type response here

1.9

7b. The dirty clothes hamper contains four black socks, a blue shirt, a red shirt, a green dress, an orange sweater, and six blue jeans. You remove the following from the clothes hamper.
 $P(\text{Blue Jean})$

Student: type response here

1.10

7c. The dirty clothes hamper contains four black socks, a blue shirt, a red shirt, a green dress, an orange sweater, and six blue jeans. You remove the following from the clothes hamper.
 $P(\text{not Green Dress})$

Student: type response here

1.11

7d. The dirty clothes hamper contains four black socks, a blue shirt, a red shirt, a green dress, an orange sweater, and six blue jeans. You remove the following from the clothes hamper.
 $P(\text{Green Dress or Black Sock})$

Student: type response here

1.12

8a. A spinner has eight numbers all equally spaced on a board. Determine the probability that the number is Even and Greater than 5.

Student: type response here

1.13

8b. A spinner has eight numbers all equally spaced on a board. Determine the probability that the number is Odd or is a 4.

Student: type response here

1.14

8c. A spinner has eight numbers all equally spaced on a board. Determine the probability that the number is less than 5 or even.

Student: type response here

1.15

9. In a class of 156 students, 90 are taking math, 70 are taking Science, and 52 are taking both. Draw a Venn diagram.

1.16

10. Suppose a number from 1 to 100 is selected at random. What is the probability that a multiple of 8 or 3 is chosen?

Student: type response here

1.17

11. An Internet company asks 100 of its customers whether they pay their bills online or by mail. What is the probability what a customer pays the bill online, given that the customer is

	A gender	B online	C mail	D
1	Male	30	34	
2	Female	25	11	
<i>C</i>		34		

1.18