AA2 wk 10 Tues/Wed

Chapter 11 Review # 2

Show all work on another piece of paper.

1. How many different 3 digit passwords can you make if you cannot repeat the digits?
2. A spinner with numbers 1-8 is spun once. Assuming all numbers are equally likely, what is:

a) P(number less than 5) b) P(odd) c) P(2 or even) d) P(odd and less than 5)

3. What is the probability that Larry will flip tails, roll an odd number on a die, then choose an ace from a standard deck of cards?
4. Lucy has 10 blue beads and 7 red beads in her hat. What is the probability of randomly selecting 4 blue beads and 5 red beads from her hat?
5. What is the probability of rolling a sum less than 8 or a sum that is a multiple of 4 when rolling two dice?
6. What is the probability of selecting a two of diamonds given that a red card has been selected from a standard deck of cards?
7. A jar contains 4 red, 8 yellow and 5 green jelly beans. What is the probability of selecting:

a) A red then a yellow without replacement. b) a yellow then a blue with replacement. c) a red then a red without replacement d) a red, then blue, then green with replacement.

8. Lou and his four friends want to place seven different candies on a circular serving dish. In how many ways can these candies be arranged?
9. From a class of 14, in how many ways can you choose a recorder, facilitator, and a presenter?
10. A numbered cube is rolled twice and the number on the top face is recorded. Find the probability that: a) the first number is greater than 4 and the second is odd b) both numbers are 5 c) the first is four and the second is a multiple of 3.
11. How many permutations of the letters in ***RESPONSIBILITY*** are possible?
12. Two numbered cubes are rolled. Find the probability that: a) the sum is 7

b) the sum is less than 7 and even.

13. There are 15 members of the water polo team and 23 members of the honor band. There are 6 students in both honor band and water polo. Find the probability of randomly selecting a student that is a member of the water polo team given that this person is a member of the honor band.
14. a) How many integers from 1-150 are divisible by 3 or 5? b) Find the probability of randomly selecting a number that is NOT divisible by 3 or 5.
15. The probability that Robbie takes out the trash when asked is 45% and the probability that Ryan Jet washes the car when asked is 30%. If these events are independent, what is the probability that both Robbie and Ryan Jet do their chores (trash and wash car) when asked?

Answers:

1. 720
2. A) $\frac{1}{2}$ B) $\frac{1}{2}$ C) $\frac{1}{2}$ D) $\frac{1}{4}$
3. $\frac{1}{52}$
4. $\frac{4410}{24310}$ about 18%
5. $\frac{3}{4}$
6. $\frac{1}{26}$
7. A) $\frac{2}{17}$ B) 0 C) $\frac{3}{68}$ D) 0 (no blues)
8. 720
9. 2184
10. A) $\frac{1}{6}$ B) $\frac{1}{36}$ C) $\frac{1}{18}$
11. 7,264,857,600
12. A) $\frac{1}{6}$ B) $\frac{1}{4}$
13. $\frac{6}{23}$
14. A) 70 B) $\frac{8}{15}$
15. .135 or 13.5%