

Math 1313
Homework 16
Section 5.4

1. The choices for problem number 18 part a from the book are given below.
 - a. Combination
 - b. Permutation

2. The choices for problem number 18 part b from the book are given below.
 - a. 10626
 - b. 255024
 - c. 331776
 - d. 6
 - e. 96

3. The choices for problem number 22 part b from the book are given below.
 - a. 279841
 - b. 212520
 - c. 8855
 - d. 92
 - e. 5.75

4. The choices for problem number 36 from the book are given below.
 - a. 5040
 - b. 840
 - c. 720
 - d. 2520
 - e. 630

Use the following problem to answer questions 5 and 6.

A coin is tossed 17 times.

5. In how many outcomes do exactly 11 heads occur?
 - a. 187
 - b. 494010316800
 - c. 8910720
 - d. 12376
 - e. 2048

6. In how many outcomes do at most 2 tails occur?
 - a. 153
 - b. 154
 - c. 18
 - d. 130918
 - e. 136

Use the following problem to answer questions 7 and 8.

In a classroom there are 28 tablets which includes 5 that are defective. If seven tablets are chosen at random to be used by student groups.

7. How many total selections can be made?
 - a. 140

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- b. 98280
 - c. 11793600
 - d. 4037880
 - e. 1184040
8. How many selections contain 2 defective?
- a. 10
 - b. 21
 - c. 336490
 - d. 706629
 - e. 33649
9. Seven cards are chosen from a well-shuffled deck of 52 playing cards. In how many selections do at least 3 Jacks occur?
- a. 23523786
 - b. 133784560
 - c. 1001
 - d. 30058171
 - e. 6534385
10. Suppose that the members of a student governance committee will be selected from the 40 members of the student senate. There are 18 sophomores, 12 juniors and 10 seniors who are members of the student senate. In how many ways can the governance committee be selected, if it must be made up of 2 sophomores, 2 juniors and 3 seniors? Assume that each of the sophomores, each of the juniors and each of the seniors is equally likely to be selected for the committee.
- a. 339
 - b. 1211760
 - c. 2160
 - d. 18643560
 - e. 25920