

Math 1313
Homework 15
Section 5.3

1. Five different types of monthly commuter passes are offered by a city's local transit authority for three different groups of passengers: youths, adults, and senior citizens. How many different kinds of passes must be printed each month?

- a. 12
- b. 15
- c. 144
- d. 125
- e. 7

2. A coin is tossed seven times and the sequence of heads and tails is recorded. Determine the number of outcomes of this activity.

- a. 8
- b. 14
- c. 32
- d. 128
- e. 64

3. A female executive selecting her wardrobe purchased four blazers, ten blouses, and five skirts in coordinating colors. How many ensembles consisting of a blazer, a blouse, and a skirt can she create from this collection?

- a. 12
- b. 84
- c. 162
- d. 56
- e. 200

4. An automobile manufacturer has three different subcompact cars in the line. Customers selecting one of these cars have a choice of three engine sizes, three body styles, and six color schemes. How many different selections can a customer make?

- a. 36
- b. 54
- c. 162
- d. 27
- e. 15

5. How many three-letter code words can be constructed from the first twelve letters of the Greek alphabet if no repetitions are allowed?

- a. 1320
- b. 98
- c. 720
- d. 10

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e. 9

6. In recent years the state of California issued license plates using a combination of one letter of the alphabet followed by four digits, followed by another three letters of the alphabet. How many different license plates can be issued using this configuration (without repetition)?

- a. 1,358,800,000
- b. 1,456,976,000
- c. 26,000,000
- d. 1,808,352,000
- e. 1,650,000,000

7. Computers manufactured by a certain company have a serial number consisting of two letters of the alphabet followed by a three-digit number. If all the serial numbers of this type have been used (repetition is allowed), how many sets have already been manufactured?

- a. 10,000
- b. 676,000
- c. 26,000
- d. 650,000
- e. 260,000

8. The choices for problem number 18 from the book are given below.

- a. 840
- b. 2,800
- c. 400
- d. 120
- e. 2,940

9. The choices for problem number 22, part c from the book are given below.

- a. 84,124,200,000
- b. 27,984,100,000
- c. 45,698,000,000
- d. 12,854,000,000
- e. 23,425,600,000

10. The choices for problem number 28, part c from the book are given below.

- a. 86,400
- b. 22,800
- c. 46,320
- d. 120,000
- e. 2,940