Assignment 8
The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

1) There are five bus lines between A and B, and four bus lines between B and C. Find the number of ways that a person can travel by bus roundtrip from A to C by way of B but without using a bus line more than once.

- a. 16
- b. 240
- c. 400
- d. 32

No, the answer is incorrect.
Score: 0
Accepted Answers:
- b. 240

2) Suppose among 70 people who like to eat ice-cream or chocolates (or both), there are 47 who like to eat ice-cream and 29 who like to eat chocolates. Find the number of people who like to eat both.

- a. 2
- b. 16
- c. 6
- d. 12

No, the answer is incorrect.
Score: 0
Accepted Answers:
- c. 6

3) A survey of households in India reveals that 82% have at least one television set, 87% have telephone service, and 80% have both telephone service and television set. What percentage of households in India have neither telephone service nor a television set?
4) A teacher gives a multiple-choice quiz that has 5 questions, each with four possible answers: A, B, C, D. What is the minimum number of students that must be in the class in order to guarantee that at least 2 answer sheets will be identical? (Assume that no answers are left blank.)

- a. 21
- b. 1025
- c. 20
- d. 1024

No, the answer is incorrect.
Score: 0
Accepted Answers:

5) Find the minimum number of integers to be selected from the set \( S = \{1, 2, \ldots, 9\} \) so that the sum of two of the integers is even.

- a. 2
- b. 3
- c. 4
- d. 5

No, the answer is incorrect.
Score: 0
Accepted Answers:

6) Five distinct positive integers are randomly chosen between 1 and 500, inclusive. What is the probability that some pair of these integers has a difference that is a multiple of 4?

- a. 4/5
- b. 2/3
- c. 1
- d. 1/2

No, the answer is incorrect.
Score: 0
Accepted Answers:

7) Assume a number of points are given inside of an equilateral triangle of side length 2. Find the least number of points such that at least two of the points are within 1-unit distance from each other.

- a. 10
- b. 2
- c. 3
- d. 5

No, the answer is incorrect.
Score: 0
Accepted Answers:
8) How many positive integers not exceeding 100 are divisible by 4 or 6?
   - a. 25  
   - b. 8  
   - c. 41  
   - d. 33
   
   No, the answer is incorrect.  
   Score: 0  
   Accepted Answers:  
   d. 33

9) How many numbers must be selected from the first nine positive integers to guarantee that there must be a pair of these integers with a sum equal to 10?
   - a. 4  
   - b. 5  
   - c. 6  
   - d. 7
   
   No, the answer is incorrect.  
   Score: 0  
   Accepted Answers:  
   c. 6

10) A basket contains 10 red balls, 10 blue balls, and 10 green balls. How many balls must be selected to be sure of having at least three balls of the same color?
   - a. 10  
   - b. 5  
   - c. 6  
   - d. 7
   
   No, the answer is incorrect.  
   Score: 0  
   Accepted Answers:  
   d. 7

11) A basket contains 5 red balls, 10 blue balls, and 15 green balls. How many balls must be selected to be sure of having at least three blue balls?
   - a. 28  
   - b. 18  
   - c. 23  
   - d. 16
   
   No, the answer is incorrect.  
   Score: 0  
   Accepted Answers:  
   c. 23

12) There are 40 different time periods during which classes at a university can be scheduled. If there are 677 different classes, how many different rooms will be needed?
   - a. 16  
   - b. 17
13. What is the minimum number of students, each of whom comes from one of the 40 states, who must be enrolled in a university to guarantee that there are at least 100 who come from the same state?

- a. 3961
- b. 2961
- c. 5961
- d. 4961

No, the answer is incorrect.
Score: 0
Accepted Answers:
- b. 17

14. There are 12 microcomputers and 8 laser printers in an office. Find the minimum number of connections to be made to connect 12 computers to 8 printers to guarantee that 8 computers can directly access 8 different printers.

- a. 64
- b. 48
- c. 32
- d. 40

No, the answer is incorrect.
Score: 0
Accepted Answers:
- d. 40

15. Determine the number of the positive integers not exceeding 2000, that are not divisible by 2, 3, or 5.

- a. 1466
- b. 534
- c. 334
- d. 1266

No, the answer is incorrect.
Score: 0
Accepted Answers:
- b. 534