

Name: _____ Period: _____ Date: _____

Permutations and Combinations Assignment

Solve problems involving permutation.

1. How many ways can six books of different titles be rearranged on a shelf?

2. In how many ways can the letters in the word "LOVED" be arranged?

3. In how many ways can four persons A, B, C and D sit in a row where A and B are seated next to each other?

In how many ways can we rearrange the letters in the word

4. EYE?

5. MISSISSIPPI?

6. How many ways can a president and a vice president be chosen from 5 candidates?

7. How many 4-letter password of distinct characters can be formed using the letters a to o?

8. How many ways can two girls and two boys be arranged in a row of four seats?

9. How many 6-letter password of distinct characters can be formed using the letters a to z?

10. In how many ways can five persons A, B, C, D and E sit in a row where B and C are seated next to each other?

Permutations and Combinations Assignment

Solve problems involving combinations.

11. How many ways can students select 5 essay question from 15 questions?

12. How many 4 - member committees can be formed from 10 persons?

13. How many diagonals does a regular octagon have?

There are 8 males and 6 females. How many 5-member committees can be formed if

14. A committee is composed of all male members?

15. A committee is composed of female members?

16. A committee composed of 3 males and 2 females?

17. A committee is composed of 4 males and a female?

18. In how many ways may a class of 10 students select three delegates for that class?

19. A store has prepared 6 different displays for Christmas. There are only three display windows. Will there be sufficient number of display arrangements for a period of 20 days without repeating any arrangement?

20. How many diagonals does a regular decagon have?