

List all possible permutations.

1) 1, 2, 3

3) A, B, C, D

2) T, V, W, taken two at a time

Evaluate each expression.

4) ${}_4P_2$

7) ${}_6P_6$

5) ${}_5P_1$

8) $-4 + {}_7P_4$

6) ${}_6P_2$

9) $5 \cdot {}_6P_5$

Find the number of unique permutations of the letters in each word.

10) DESIGN

13) FURTHER

11) MATH

14) BALLISTICS

12) CHEESE

15) BILLIONAIRE