

Assignment: Permutation and Combination

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

1) MARVELOUS

2) CIRCULAR

3) WATERMELON

4) CONNECTED

Evaluate each expression.

5) $4 \cdot {}_{22}C_2$

6) ${}_{18}C_3 + 2$

7) $4 \cdot {}_{10}C_4$

8) ${}_{13}C_9$

Find the number of possible outcomes in the sample space.

9) A spinner can land on either red or blue. You spin eight times.

10) Seven books need to be placed on a shelf. You randomly arrange the books on the shelf from left to right.

11) The chess club must decide when and where to meet for a practice. The possible days are Monday, Tuesday, Wednesday, or Thursday. The possible times are 3, 4, or 5 p.m. There are ten classrooms available.

12) A math quiz has six true/false questions.

Answers to Assignment: Permutation and Combination

1) 362,880
5) 924
9) 256

2) 10,080
6) 818
10) 5040

3) 1,814,400
7) 840
11) 120

4) 45,360
8) 715
12) 64

