

Combinations

Name _____

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Date _____

Evaluate each expression.

1) ${}_{24}C_4$

2) ${}_{13}C_5$

3) ${}_{16}C_5$

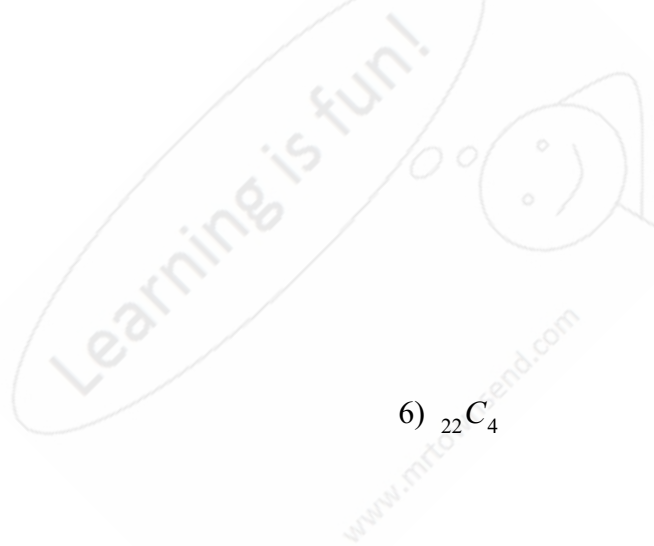
4) ${}_{17}C_{12}$

5) ${}_{13}C_7$

6) ${}_{22}C_4$

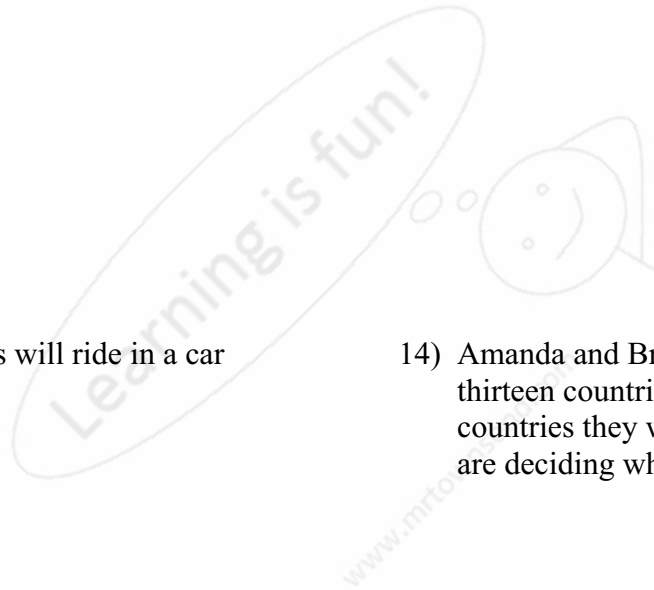
7) ${}_{16}C_{11}$

8) ${}_{25}C_3$



Find the number of possibilities in each scenario.

- 9) Pranav has homework assignments in four subjects. He only has time to do one of them.
- 10) There are 25 applicants for two Manager positions.
- 11) A team of 11 dodgeball players needs to choose three players to refill the water cooler.
- 12) Kathryn has homework assignments in six subjects. She only has time to do three of them.
- 13) 5 out of 12 students will ride in a car instead of a van
- 14) Amanda and Brenda are planning trips to thirteen countries this year. There are 15 countries they would like to visit. They are deciding which countries to skip.
- 15) There are 200 athletes at a meeting. They each shake hands with everyone else. How many handshakes were there?
- 16) A group of 24 people need to take an elevator to the top floor. They will go in groups of eight. They are deciding who will take the elevator on its second trip.



Answers to Combinations

1) 10,626
5) 1,716
9) 4
13) 792

2) 1,287
6) 7,315
10) 300
14) 105

3) 4,368
7) 4,368
11) 165
15) 19,900

4) 6,188
8) 2,300
12) 20
16) 735,471

