Precalculus Practice S.CP.B.9: Multiplication Counting Principle www.jmap.org

- 1. There are 10 girls and 10 boys at a school dance. Each boy dances with each girl one time. How many dances are there in all?
  - [A] 1000 [B] 10 [C] 20 [D] 100

NAME:

 A cafe serves a variety of stuffed potatoes. You can choose from russet, yellow, or white potatoes with any of 10 different fillings. How many different varieties of stuffed potatoes can you choose from?

 A yogurt shop offers two different flavors of frozen yogurt and three different toppings. How many choices are possible for a single serving of frozen yogurt with one topping?

[A] 15 [B] 6 [C] 5 [D] 8

6. Suppose Ruth Ann has three routes she can choose from to get from school to the library, and 4 routes from the library to her home. How many routes are there from Ruth Ann's school to her home with a stop at the library?

3. Jamestown Builders has a development of new homes. There are four different floor plans, six exterior colors, and an option of either a one- or a two-car garage. How many choices are there for one home?

[A] 26 [B] 48 [C] 72 [D] 40

7. Use any problem solving strategy to solve the following problem. There are 6 possible ways to make two selections. If the events are independent, how many possible ways are there to make the first selection?

4. A lunch menu consists of 4 different kinds of sandwiches, 2 different kinds of soup, and 5 different drinks. How many choices are there for ordering a sandwich, a bowl of soup, and a drink?

[A] 3 [B] 40 [C] 11 [D] 5760

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- [1] D
- [2] B
- [3] <u>B</u>\_\_\_\_\_
- [4] <u>B</u>
- [5] 30
- [6] 12
- [7] 1, 2, 3, or 6