

***Explanation:*** *The multiplication rule tells us that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

**Practice problems**

1. *What is the probability of choosing a green and blue marble from a jar containing 5 red, 6 blue, and 8 green?*
2. *What is the probability of choosing three blue ones in a row, if a jar contains 5 red, 6 blue, and 8 green marbles.*
3. *What is the probability of choosing a queen, and king, and ace from a standard deck of card?*
4. *What is the probability of choosing a queen or a king or an ace from a standard deck of cards?*

Suppose the following probabilities represent the likelihood that a car is manufactured in the specific country:

**United States 0.4 Japan 0.3**

**Germany 0.1 Other 0.2**

If cars are selected at random find the probability that:

***KEY WORDS***

**AND = Multiplication OR = Addition NOT = 1—(Probability Yes)**

1. A car is **not made** in the U.S.
2. A car is made in Germany **or** Japan.
3. You see two in a row from Japan.
4. **None of three** cars came from Germany.
5. At least **one of three** cars is made in the U.S.
6. The **first** Japanese car is the **fourth** one you choose.