Answer on Question #42704 - Math - Statistics and Probability

35 ribbons in a drawer. 7 yellow 6 blue 9 red 3 green each ribbon selected only once. what is probability 2 green ribbons will be selected

Remark. We suppose that there is a typos in a statement, because $7 + 6 + 9 + 3 = 25 \neq 35$. It should be "There are 25 ribbons in a drawer." instead of "35 ribbons in a drawer".

Solution. There are $\binom{25}{2} = \frac{24 \cdot 25}{2} = 300$ ways to choose 2 ribbons and $\binom{3}{2} = 3$ ways to choose 2 green ribbons.

The probability that 2 green ribbons will be selected equals

$$P(2 \text{ green ribbons}) = \frac{3}{300} = \frac{1}{100}.$$

Answer: $\frac{1}{100}$.