Answer on Question #55128 - Math - Statistics and Probability

True or False? Justify.

Number of samples chosen by SRSWOR and SRSWR are same if population size is 6 and sample size is 2.

Solution

If n units are selected by SRSWOR, the total number of possible samples are:

$$\binom{N}{n}$$
.

When n units are selected with SRSWR, the total number of possible samples are

$$N^n$$
.

In our case

$$\binom{6}{2} = \frac{6!}{2! \, 4!} = 15,$$

$$6^2 = 36$$
.

So, it is False.

Answer: False.