## Answer on Question \#71838 - Math - Statistics and Probability

## Question

A shipment of five computers two or that are slightly defective. If a retailer receives three of these computers at random, list the elements of the sample space $S$ using the letter $P$ and $N$ for defective and non-defective computers respectively. To teach sample point assign a value $X$ of the random variable $X$ representing the number of computers purchased by the retailer which are slightly defective.

## Solution

The Sample space $S$ is the following

1. 3 non-defective, NNN
2. 2 non-defective and 1 defective, PNN
3. 1 non-defective and 2 defective, PPN

Let $X$ be the random variable representing number of computers purchased being defective

1. $N N N, X=0$
2. $\mathrm{PNN}, \mathrm{X}=1$
3. $P P N, X=2$
