Assignment 16.3

In a class on 100 students, 80 students passed in all subjects, 10 failed in one subject, 7 failed in two subjects and 3 failed in three subjects. Find the probability distribution of the variable for number of subjects a student from the given class has failed in.

The probability of students failing in 0 subjects, P(X=0) = 80/100 = 0.8

The probability of students failing in 0 subjects, P(X=1) = 10/100 = 0.1

The probability of students failing in 0 subjects, P(X=2) = 7/100 = 0.07

The probability of students failing in 0 subjects, P(X=3) = 3/100 = 0.03

The probability distribution of the variable for number of subjects a student from the given class has failed in:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| X | 0 | 1 | 2 | 3 |
| P(X) | 0.8 | 0.1 | 0.07 | 0.03 |