

Question 10.13.1.22 The probability of getting a bad egg in a lot of 400 is 0.035. The number of bad eggs in the lot is

Solution:

parameters	values	description
X	1	good eggs
	0	bad eggs

TABLE I
RANDOM VARIABLE

$$P_X(X) = \begin{cases} 0.965, & X = 1 \\ 0.035, & X = 0 \end{cases}$$

Given :

$$S = 400$$

$$\Pr(X = 0) = 0.035$$

$$(X=0) = \Pr(X = 0) \times S$$

$$\text{bad eggs} = 14$$