

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:

$$X = \begin{cases} 1, & \text{good egg} \\ 0, & \text{bad egg} \end{cases}$$

parameter	value	description
X	1	good egg
X	0	bad egg

TABLE I
RANDOM VARIABLE

Given:

Size of lot = 400

$\Pr(X = 0) = 0.035$

$$\Pr(X = 0) = \frac{\text{bad eggs}}{\text{size of lot}}$$

$$\text{bad eggs} = \Pr(X = 0) \times 400$$

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