

49. An insurance policy pays an individual 100 per day for up to 3 days of hospitalization and 25 per day for each day of hospitalization thereafter.

The number of days of hospitalization, X , is a discrete random variable with probability function

$$P(X = k) = \begin{cases} \frac{6-k}{15} & \text{for } k = 1, 2, 3, 4, 5 \\ 0 & \text{otherwise.} \end{cases}$$

Calculate the expected payment for hospitalization under this policy.

- (A) 85
- (B) 163
- (C) 168
- (D) 213
- (E) 255