

6. For a sample of dental claims x_1, x_2, \dots, x_{10} , you are given:

(i) $\sum x_i = 3860$ and $\sum x_i^2 = 4,574,802$

(ii) Claims are assumed to follow a lognormal distribution with parameters μ and σ .

(iii) μ and σ are estimated using the method of moments.

Calculate $E[X \wedge 500]$ for the fitted distribution.

(A) Less than 125

(B) At least 125, but less than 175

(C) At least 175, but less than 225

(D) At least 225, but less than 275

(E) At least 275