

279. Loss amounts have the distribution function

$$F(x) = \begin{cases} (x/100)^2, & 0 \leq x \leq 100 \\ 1 & , \quad 100 < x \end{cases}$$

An insurance pays 80% of the amount of the loss in excess of an ordinary deductible of 20, subject to a maximum payment of 60 per loss.

Calculate the conditional expected claim payment, given that a payment has been made.

(A) 37

(B) 39

(C) 43

(D) 47

(E) 49