

228. For a fully continuous whole life insurance of 1 on (x) :

(i) $\bar{A}_x = 1/3$

(ii) $\delta = 0.10$

(iii) L is the loss at issue random variable using the premium based on the equivalence principle.

(iv) $\text{Var}[L] = 1/5$

(v) L' is the loss at issue random variable using the premium π .

(vi) $\text{Var}[L'] = 16/45$.

Calculate π .

(A) 0.05

(B) 0.08

(C) 0.10

(D) 0.12

(E) 0.15