

**142.** For a fully continuous whole life insurance of 1 on  $(x)$ :

- (i)  $\pi$  is the benefit premium.
- (ii)  $L$  is the loss-at-issue random variable with the premium equal to  $\pi$ .
- (iii)  $L^*$  is the loss-at-issue random variable with the premium equal to  $1.25 \pi$ .
- (iv)  $\bar{a}_x = 5.0$
- (v)  $\delta = 0.08$
- (vi)  $\text{Var}(L) = 0.5625$

Calculate the sum of the expected value and the standard deviation of  $L^*$ .

- (A) 0.59
- (B) 0.71
- (C) 0.86
- (D) 0.89
- (E) 1.01