

287. For an aggregate loss distribution S :

- (i) The number of claims has a negative binomial distribution with $r = 16$ and $\beta = 6$.
- (ii) The claim amounts are uniformly distributed on the interval $(0, 8)$.
- (iii) The number of claims and claim amounts are mutually independent.

Using the normal approximation for aggregate losses, calculate the premium such that the probability that aggregate losses will exceed the premium is 5%.

- (A) 500
- (B) 520
- (C) 540
- (D) 560
- (E) 580