

96. Insurance agent Hunt N. Quotum will receive no annual bonus if the ratio of incurred losses to earned premiums for his book of business is 60% or more for the year. If the ratio is less than 60%, Hunt's bonus will be a percentage of his earned premium equal to 15% of the difference between his ratio and 60%. Hunt's annual earned premium is 800,000.

Incurred losses are distributed according to the Pareto distribution, with $\theta = 500,000$ and $\alpha = 2$.

Calculate the expected value of Hunt's bonus.

- (A) 13,000
- (B) 17,000
- (C) 24,000
- (D) 29,000
- (E) 35,000