

59. An insurer's annual weather-related loss, X , is a random variable with density function

$$f(x) = \begin{cases} \frac{2.5(200)^{2.5}}{x^{3.5}} & \text{for } x > 200 \\ 0 & \text{otherwise.} \end{cases}$$

Calculate the difference between the 30th and 70th percentiles of X .

- (A) 35
- (B) 93
- (C) 124
- (D) 231
- (E) 298