

103. For watches produced by a certain manufacturer:

- (i) Lifetimes follow a single-parameter Pareto distribution with $\alpha > 1$ and $\theta = 4$.
- (ii) The expected lifetime of a watch is 8 years.

Calculate the probability that the lifetime of a watch is at least 6 years.

- (A) 0.44
- (B) 0.50
- (C) 0.56
- (D) 0.61
- (E) 0.67