

**286.** Michael is a professional stuntman who performs dangerous motorcycle jumps at extreme sports events around the world.

The annual cost of repairs to his motorcycle is modeled by a two parameter Pareto distribution with  $\theta = 5000$  and  $\alpha = 2$ .

An insurance reimburses Michael's motorcycle repair costs subject to the following provisions:

- (i) Michael pays an annual ordinary deductible of 1000 each year.
- (ii) Michael pays 20% of repair costs between 1000 and 6000 each year.
- (iii) Michael pays 100% of the annual repair costs above 6000 until Michael has paid 10,000 in out-of-pocket repair costs each year.
- (iv) Michael pays 10% of the remaining repair costs each year.

Calculate the expected annual insurance reimbursement.

- (A) 2300
- (B) 2500
- (C) 2700
- (D) 2900
- (E) 3100