

**284.** A risk has a loss amount which has a Poisson distribution with mean 3.

An insurance covers the risk with an ordinary deductible of 2. An alternative insurance replaces the deductible with coinsurance  $\alpha$ , which is the proportion of the loss paid by the insurance, so that the expected insurance cost remains the same.

Calculate  $\alpha$ .

(A) 0.22

(B) 0.27

(C) 0.32

(D) 0.37

(E) 0.42