

135. The number of workplace injuries, N , occurring in a factory on any given day is Poisson distributed with mean λ . The parameter λ is a random variable that is determined by the level of activity in the factory, and is uniformly distributed on the interval $[0, 3]$.

Calculate $\text{Var}(N)$.

- (A) λ
- (B) 2λ
- (C) 0.75
- (D) 1.50
- (E) 2.25