2. Probability of more than one occurrence is :

$$P_r\{X_{t+h}\text{-}X_t \geq 2\} = o(h)$$

$$= \sum_{k=2}^{\infty} P_k\,(h)$$

3. Probability that no event occur in any short interval (h) is:

$$P_r\{X_{t+h}\text{-}X_t = 0\} = 1 - \lambda h + o(h) = P_0(h)$$