

2018 SMM4 Week 10 Investigation

Poisson Distribution

Q1. If a bank receives on average 6 bad checks per day:

a) What is the probability that the bank will receive 4 bad checks on a given day?

b) What is the probability it will receive 9 bad checks in any given 2 days?

c) What is the probability it will receive at least 1 bad check every 2 hours? (Business day is from 8am - 6pm = 10 hours)

Q2. A local drugstore owner knows that, on average, 100 people per hour stop by his store. Find the probability that in a given 3-minute period nobody enters the store.