

1. Automobiles arrive at the Elkhart exit of the Indiana Toll Road at the rate of two per minute. The distribution of arrivals approximates a Poisson distribution. What is the probability that:
a) no automobiles arrive in a particular minute? b) at least three automobiles arrive during a particular minute?
2. Suppose 1.5% of the antennas on new Nokia cell phones are defective. For a random sample of 200 antennas, find the probability that: a) none of the antennas is defective, b) three or more of the antennas are defective.
3. A study of the checkout lines at the Safeway Supermarket in the South Strand area revealed that between 4 and 7 P.M. on weekdays there is an average of four customers waiting in line. What is the probability that you visit Safeway today during this period and find: a) no customers are waiting, b) four customers are waiting, c) four or fewer are waiting, d) four or more are waiting