1. X is a normally distributed variable with mean μ = 30 and standard deviation σ = 4. Find   
     
   a) P(x < 40)   
     
   b) P(x > 21)   
     
   c) P(30 < x < 35)
2. A radar unit is used to measure speeds of cars on a motorway. The speeds are normally distributed with a mean of 90 km/hr and a standard deviation of 10 km/hr. What is the probability that a car picked at random is travelling at more than 100 km/hr?
3. For a certain type of computers, the length of time between charges of the battery is normally distributed with a mean of 50 hours and a standard deviation of 15 hours. John owns one of these computers and wants to know the probability that the length of time will be between 50 and 70 hours.
4. The annual salaries of employees in a large company are approximately normally distributed with a mean of $50,000 and a standard deviation of $20,000.   
     
   a) What percent of people earn less than $40,000?   
     
   b) What percent of people earn between $45,000 and $65,000?   
     
   c) What percent of people earn more than $70,000?