1. The average outstanding credit card balance for young couples is $650 with a standard deviation of $420.
2. What is the probability that a couple chosen at random has a credit card balance exceeding $700?
3. What is the probability that a random sample of 100 young couples have a mean credit card balance exceeding $700?
4. What is the probability that a random sample of 200 young couples have a credit card balance totaling less than $125,000?
5. The probability that 50 randomly chosen young couples have an average credit card balance greater than a certain average is 0.29. What is the average amount?
6. The probability that 50 randomly chosen young couples have an average credit card balance less than a certain average is 0.37. What is the average amount?
7. The probability that 100 randomly chosen young couples have a total credit card balance greater than a certain total is 0.19. What is the total amount?
8. The probability that 100 randomly chosen young couples have a total credit card balance less than a certain total is 0.42. What is the total amount?
9. The average amount of time that people spend going through airport security for planes at a busy airport is 21 minutes with a standard deviation of 4.2 minutes.
10. What is the probability that a person has to wait more than 25 minutes?
11. What is the probability that the average wait for a SRS of 40 people is more than 22 minutes?
12. What is the probability that the total wait time for 50 people is less than 1080 minutes?
13. The probability that 30 randomly chosen people have an average wait time longer than a certain average is 0.27. What is the average value?
14. The probability that 100 randomly chosen people have a total wait time less than a certain total is 0.18. What is the total value?
15. The cost of treatment per patient for a certain medical problem was modeled by one insurance company as a normal distribution with mean $775 and standard deviation $150.
    1. What is the probability that the treatment cost for a randomly chosen patient is more than $800?
    2. What is the probability that the total treatment cost for 15 randomly chosen patient is more than $12,000?
    3. What is the probability that the average treatment cost for 35 randomly chosen patient is less that $750?
    4. The probability that 20 randomly chosen people have a total treatment cost above a certain total is 0.23. What is the total value?
    5. The probability that 40 randomly chosen people have an average treatment cost less than a certain average is 0.18. What is the average value?
16. The weight of corn chips dispensed into a 17- ounce bag by the dispensing machine has been identified as possessing a normal distribution with a mean of 17.5 ounces and a standard deviation of 0.1 ounce. Suppose 100 bags of chips are randomly selected. Find the probability that the mean weight of these 100 bags exceeds 17.6oz.
17. Scores on a biology final exam are normally distributed with a mean of 220 and a standard deviation of 24. Determine the percentage of samples of size 9 that will have mean scores within 12 points of the population mean score of 220.
18. The amount of coffee that a filling machine puts into an 8- ounce jar is normally distributed with a mean of 8.2 ounces and a standard deviation of 0.18 ounce. Determine the percentage of samples of size 16 that will have mean amounts of coffee within 0.1 ounce of the population mean of 8.2oz.