1. Assume that women’s height are normally distributed with a mean given by =63.4 in, and a standard deviation given by =2.7in.
2. If 1 woman is randomly selected, find the probability that her height is less than 64 in.
3. If 46 women are randomly selected find the probability that they have a mean height less than 64 in.
4. Cans of a certain beverage are labeled to indicate that they contain 8oz. The amounts in a sample of cans are measured and the sample statistics are n=44 and x=8.04oz. If the beverage cans are filled so that µ=8.00 oz (as labeled) and the population standard deviations is σ=0.107 oz (based on the sample results), find the probability that a sample of 44 cans will have a mean of 8.04 oz or greater. Do these results suggest that the beverage cans are filled with an amount greater than 8.00 oz?

The probability that a sample of 44 cans will have a mean of 8.04 oz or greater, given that µ =8.00 and σ =0.107, is\_\_\_\_

1. (a) With n=11 and p=0.6, find the binomial probability P(5) by using a binomial table. (b) If np ≥ 5 and nq ≥ 5, also estimate the indicated probability by using the normal distribution as an approximation to the binomial; if np < 5 or nq < 5, then state the normal approximation cannot be used.
2. Find the probability by using a binomial probability table.

P(5)=\_\_\_(round 3 decimal places as needed)

1. Assume the readings on thermometers are normally distributed with a mean of 0 C and a standard deviation of 1.00 C. Find the probability that a randomly selected thermometer reads less than 0.13 and draw a sketch of the region.
2. a) If the random variable z is the standard normal score and a>0, is it true that P (z<-a)= P(z>a)? Why or why not?

b) Find the z-score for the standard normal distribution where Area=0.32 in the left trail