1. Heights of women have a bell shaped distribution with a mean of 161cm and a standard deviation of 6cm. Using Chebyshev’s theorem, what do we know about the percentage of women with heights that are within 2 standard deviations of the mean? What are the minimum and maximum heights that are within 2 standard deviations of the mean?
2. Assume that a prodcure yields a binomial distrubtion with a trail repeated n times. Use a binomial probabilities table to find the probability of x successes given the probability p of success on a given trail.

n=2, x=2, p=0.70

P(2)=\_\_\_\_\_

3. A brand name has an 80% recognition rate. If the owner of the brand wants to vertify that rate by beginning with as small sample of 5 randomly selected consumers, find the probability that exactly 4 of the 5 consumers recognize the brand name. Also find the probability that the number who recognize the brand name is not 4.

4. Assume that a procedure yields a binomial distrubtion with n trails and the probability of success for one trail is p. Use the given values of n and p find the mean and standard deviation. Also use the range rule of thumb to find the mininum usual value µ + 2ợ

N=190, p=0.25

Mean=\_\_\_\_ Standard deviation=\_\_\_\_