1. In a genetics experiment on peas, one sample of offspring contained 450 green peas and 1523 yellow peas.

Based on those results, estimate the probability of getting an offspring pea that is green. Is the result reasonably close to the value of ¾ that was expected?

The probability of getting a green pea is approximately\_\_\_\_\_\_

Is this probability reasonably close to ¾? Choose the correct answer below

\_\_\_\_No, it is not reasonably close.

\_\_\_\_Yes, it is reasonably close

2. With one method of a procedure called acceptance sampling, a sample is items is randomly selected without replacement and the entire batch is accepted if every item in the sample is okay. A company has just manufactured 705 CD’s and 208 are defective. If 8 of these CDs are randomly selected for testing. What is the probability that the entire batch will be accepted?

The probability that the whole batch is accepted is \_\_\_\_\_

(Round to the nearest thousandth as needed)

3. Evaluate the given expression and express the result using the usual format for writing numbers. (instead of scientific notation)

8!

8! =

4. Determine the written description of the complement of the given event.

When 11 job applicants are tested for certain ability, at least one of them tests negative.

A. More than one of them tests positive.

B. All of them test positive

C. None of them test positive.

D. All of them test positive

5. A “combination” lock is opened with the correct sequence of three numbers between I and 88 inclusive. (A number can be used more than once) What is the probability of guessing those three numbers and opening the lock with the first try?

P (First guess opens lock) =

Type an integer or simplified fraction.

6. A certain lottery is won by selecting the correct four numbers from 1, 2 ...31. The probability of wining that game is 1/31.465.

What is probability of winning if the rules are changed so that in that in addition to selecting the correct four numbers you must now select them in the same order as they were drawn?

P (winning) =

7. The data in the following table summarizes blood groups and RH types for 95 typical people. If the person is randomly selected, find P (not type RH ).

P (not type RH ) =

Do not round until the final answer. Then round to three decimal places as needed.