

AP Statistics Summer Assignment

- Gather 5 sets of data from any sources 2 categorical data and 3 quantitative data. (Ex. LeBron's summary of points per game in 2015 season, Olympic Men's long jump records from 1896 when World Olympic started to 2012.)
 - Display your data in an appropriate graph and describe it in context of the problem. Don't forget to write conclusions. (Research on how to describe a graph)
- Barron's AP Statistics reviewer latest edition.
- 3 Ring Binder
- TI 84 Graphing Calculator(optional)
- Colored Markers

Answer the following problems. Show complete work. Interpret results in context of the problem

- Tickets are numbered 1 to 20 are mixed up and then a ticket is drawn at random. What is the probability that the ticket drawn has a number which is a multiple of 3 or 5?
- A bag contains 2 red, 3 green and 2 blue balls. Two balls are drawn at random. What is the probability that none of the balls drawn is blue?
- In a box, there are 8 red, 7 blue and 6 green balls. One ball is picked up randomly. What is the probability that it is neither red nor green?
- What is the probability of getting a sum 9 from two throws of a dice?
- In a lottery, there are 10 prizes and 25 blanks. A lottery is drawn at random. What is the probability of getting a prize?
- The shelf life of a particular dairy product is normally distributed with a mean of 12 days and a standard deviation of 3 days.
 - About what percent of the products last between 9 and 15 days?
 - About what percent of the products last between 12 and 15 days?
 - About what percent of the products last 6 days or less?
 - About what percent of the products last 15 or more days?
- The length of similar components produced by a company are approximated by a normal distribution model with a mean of 5 cm and a standard deviation of 0.02 cm. If a component is chosen at random
 - What is the probability that the length of this component is between 4.98 and 5.02 cm?
 - What is the probability that the length of this component is between 4.96 and 5.04 cm?