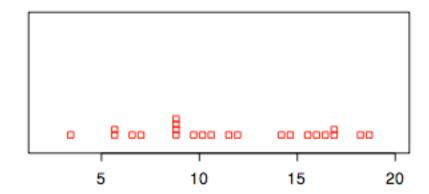
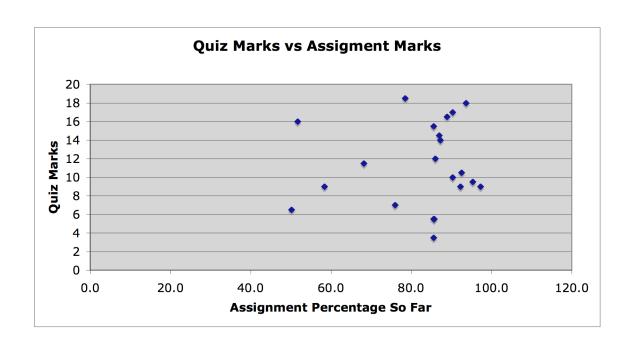
quiz marks out of 24







Where were answers to Quiz?

Re Q#1

Jan 10

Note time series (order matters) See Example 1.7 - histogram not useful in this case.

Jan 12

7. What feature of a data set makes a histogram a suitable summary? If **the order of observations has no relevant information** – most time series certainly should not be summarized this way.

Re Q#2 Part i) we **discussed in class more than once**. Part ii) is in Notes Feb 2 and in class.

Re Q#3

Jan 26

Every sequence of length 5 with 3

Hs and 2 Ts can be specified by specifying the order numbers of the 3 Hs. There are five possibilities $\{1,2,3,4,5\}$ and we need to choose 3 of them (without regard to order – just which subset are we choosing). If we had chosen the subset $\{2,3,5\}$ we would have selected THHTH. But there are C3,5 ways to select this subset, and so there are C3,5 ways to create the length 5 sequence with 3 Hs and 2 Ts. So P(number of Hs in 5 tosses =3)= C3,5 times p3(1-p)2. The general case is the formula

$$P(X=x)=Cn, x px(1-p)(n-x) x=0,1,2,...,n$$

for the binomial probabilities.

So if p = .5 (to make the calculation easy) and n=5 then P(no of Hs = 3) = C5,3(.5)3(1-.5)2 = 10/32. Clearly the formula simplifies the calculation. However, the formula is not too difficult to derive or explain, and so **you should know how to do this.**

Re Q#4

Assignment 3 should have prepared you for parts i) and ii). part iii) came out of the discussion on the normal distribution in class.

Re Q#5

Just like Ex 78 of assignment #2.

How to study this course?

Assignments – necessary as coercion to read the text.

Reading more important than answers. Think of text as an authority with definitions

Lectures – contain explanations that you need to know

Spend time with the notes – marginal notes. Use the Stat Workshop Use my Office Hours Use e-mail to me

Quiz and Midterm – review, understand why mistakes were made, and what you did right