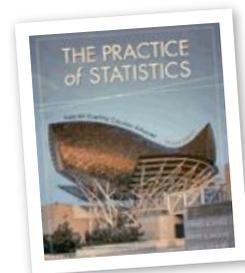


AP STATS CHAPTER 2: THE NORMAL DISTRIBUTIONS

"THOU, NATURE, ART MY GODDESS; TO THY LAWS, MY SERVICES ARE BOUND..." ~ SHAKESPEARE'S KING LEAR & GAUSS' MOTTO



Tentative Lesson Guide					
Date		Stats	Lesson	Assignment	Done
Mon	9/25	2.1	Normal Dist Activity	Read Intro to Ch2	
Tues	9/26	2.1	Density Curves	Rd 78-83 Do 1-4	
Wed	9/27	2.1	Normal Distributions	Rd 85-90 Do 6-9, 11-15	
Thu	9/28	2.2	Standardizing, Normal Curves	Rd 93-101 Do 19-24	
Fri	9/29	2.2	z-score Calculations	Rd 101-109 Do 26, 28-34	
Mon	10/2	Quiz	Review/Quiz		
Tues	10/3	2.2	Assessing Normality	Normal Dist Practice	
Wed	10/4	Rev	Review Chapter 2	Rd 112 Do 40-42, 44-48	
Thu	10/5	Rev	Review Chapter 2	Chapter 2 Online Quiz	
Fri	10/6	Woohoo!	Homecoming!		
Mon	10/9	Exam	Chapter 2 Exam	Homework Due	

Note:

The purpose of this guide is to help you organize your studies for this chapter. The schedule and assignments may change slightly.

Keep your homework organized and refer to this when you turn in your assignments at the end of the chapter.



Class Website:

Be sure to log on to the class website for notes, worksheets, links to our text companion site, etc.

<http://web.mac.com/statsmonkey>

Don't forget to take your online quiz!. Be sure to enter my email address correctly!

<http://bcs.whfreeman.com/yates2e>

My email address is:

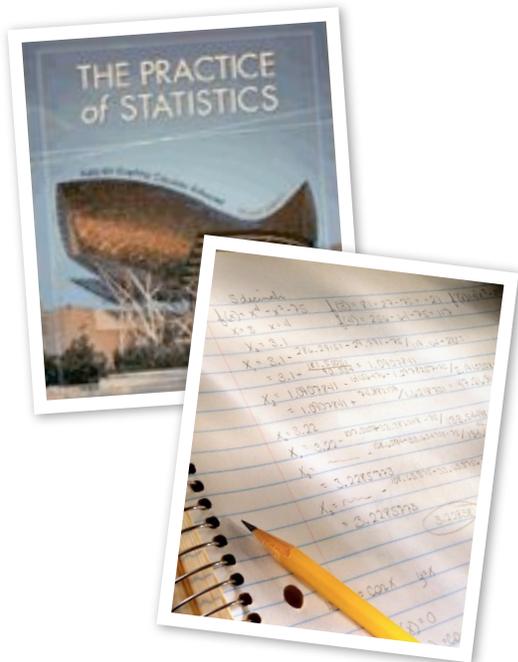
jmmolesky@isd194.k12.mn.us

Chapter 2 Objectives and Skills:

These are the expectations for this chapter. You should be able to answer these questions and perform these tasks accurately and thoroughly. Although this is not an exhaustive review sheet, it gives a good idea of the "big picture" skills that you should have after completing this chapter. The more thoroughly and accurately you can complete these tasks, the better your preparation.

DENSITY CURVES:

- What's the point of a density curve? How are they different than relative frequency histograms or other visual displays?
- What are the fundamental properties of a density curve?
- Given a density curve, can you calculate the probability of a particular event happening?
- Given a density curve, use symmetry, a bit of math, and problem-solving to find areas under a curve, quartiles, percentiles, medians, etc...
- Understand how the shape of a density curve indicates the relative positions of the mean, the median and the mode.



NORMAL DISTRIBUTIONS:

- What are the fundamental properties of a normal density curve?
- Give examples of variable which would have a normal distributions. Give an example of some variables which have non-normal distributions.
- What are z-scores? Explain them to a person who knows just a little bit of statistics. Why are they used?
- Explain the meaning of the 68-95-99.7 rule, and use it to estimate the probability of events coming from a normal distribution.
- What is the standard normal distribution?
- Give a clear, well detailed, and accurate probability calculation for problems that require the use of normal distributions. A clear, error-free path to a final answer is expected.
- Be able to calculate percentiles for normally distributed data. Again, a clear path to a final answer is expected.

ASSESSING NORMALITY:

- Given a set of data, judge whether you think that they are normally distributed. You should be able to do this in at least two different ways (what are the two ways?)
- Use the TI-83 to quickly and easily calculate probabilities and percentiles from normal distributions.
- Use normal distribution tables in your textbook to perform the same skills.

