

Statistics 101 – Homework 1

Due Friday, January 22, 2010

Homework is due on the due date at the end of the lecture.

Reading: January 11 – January 15 Chapters 1, 2 & 3
 January 20 – January 25 Chapter 4

Assignment:

1. Do the following problems from the text, *Intro Stats*, 3rd Edition. If you have an earlier edition of the text, check with someone who has the 3rd Edition to make sure you do the correct problems.

- Chapter 2 – problems 2, 3, 7, 13, and 14
- Chapter 3 – problems 5, 7, and 17

1. A sample of 327 students in grades 4 – 6 in selected schools in Michigan were asked the following question about their school goals, specifically “What would you most like to do at school?” The students could choose either “make good grades,” “be good at sports” or “be popular.” It was also noted whether the student was from a rural school or an urban school. A summary of how many students from each type of school and their answers to the question is given in the table below.

	What would you most like to do at school?			
	Grades	Popular	Sports	
Rural	57	50	42	149
Urban	103	49	26	178
	160	99	68	327

- Identify the Who for this data set.
- Identify the two variables (the Whats) collected on each Who.
- Combining rural and urban together, create an appropriately labeled bar chart for the percentage of students who answered the question “What would you most like to do at school?” What does the bar chart indicate about school goals for students in grades 4 – 6?
- Find row percentages for rural and urban schools. What do these percentages indicate about the difference between rural and urban schools in terms of school goals for students in grades 4 – 6?
- Create a graphical display of the row percentages you found in d).
- Extra Credit:** Use JMP to make a segmented bar chart (mosaic plot) that displays the percentages in d). Turn in the JMP output.