

Tables and Graphs of Data

Vocabulary

Table	A display of information in parallel rows or columns
Cell	The intersection of a row and column

Example:

This table shows data collected from students in Intermediate Algebra in the Fall of 2008 by this instructor. Students were asked to identify three items that personally helped them the most to learn the material in the course. The top three choices from each group are *highlighted*.

Class Lectures	Handouts in Class	Hard Copy Text	Graded Daily Homewk	Test Review Handout	Online Computer Help	Online Practice Test	Online Textbook	My Instructor	Tutors in Math Lab	Personal Tutor	Other students or adults	
Freshmen Textbook Users N=12	8 66.7%	8 66.7%	2 16.7%	2 16.7%	9 75.0%			7 58.3%	2 16.7%	1 8.3%	1 8.3%	
Other Textbook Users N=9	6 66.7%	5 55.6%	3 33.3%	3 33.3%	5 55.6%			2 22.2%	2 22.2%	0 0.0%	0 0.0%	
Freshmen Computer Users N=20	10 50.0%	10 50.0%	0 0.0%	2 10.0%	5 25.0%	14 70.0%	8 40.0%	3 15.0%	10 50.0%	1 5.0%	2 10.0%	0 0.0%
Other Computer Users N=13	6 42.9%	8 61.5%	1 7.7%	0 0.0%	4 30.8%	9 69.2%	1 7.7%	0 0.0%	7 53.8%	5 38.5%	2 15.4%	1 7.7%
All Textbook Users N=21	14 66.7%	12 57.1%	5 23.8%	5 23.8%	13 61.9%				8 38.1%	4 19.0%	0 0.0%	1 4.8%
All Computer Users N=33	14 42.4%	17 51.5%	1 3.0%	1 3.0%	8 24.2%	21 63.6%	8 24.2%	3 9.1%	15 45.5%	6 18.2%	4 12.1%	1 3.0%

TRY: Which one item was marked as a “top three” by every group?

[This data helped your instructor decide to create the workbook you are currently using.]

Of all the students who used the textbook only to complete all homework assignments (textbook users), how many indicated the hard copy text was one of the top three sources to help them learn the material?

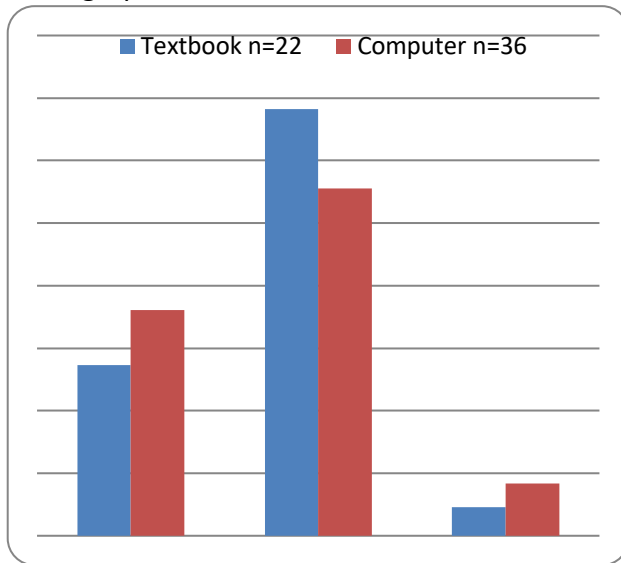
Of all the students who used the computer only to complete all homework assignments (computer users), what percent of all computer users indicated the hard copy text was one of the top three sources to help them learn the material?

Of Freshmen computer users, what item was selected by the highest percentage?

How many selected it?

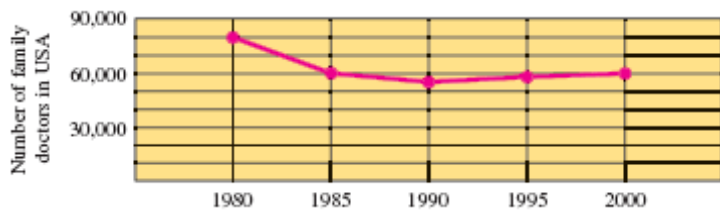
TRY: Reading a Graph

A bar graph:



1. Approximately what percent of textbook users received a grade of B, B-, B+, or C?
2. What is the difference in percentages between textbook users receiving A to B+ and those receiving B to C?

A line graph



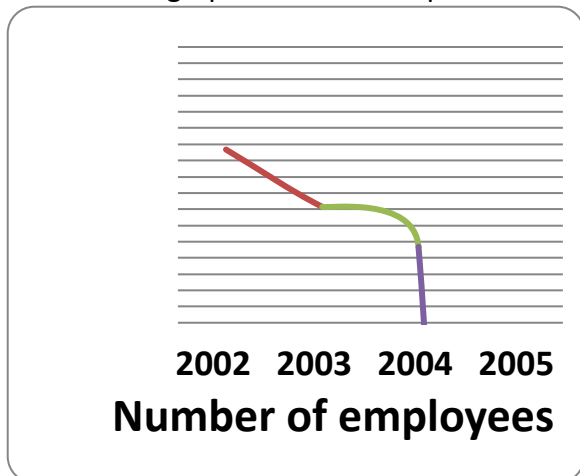
1. How many fewer family doctors were there in the US in 1990 than in 1980?
2. What was the percent of total change in family doctors between 2000 and 1980?

Making a prediction using a line graph:

One should be cautious about using **extrapolation** – using an earlier trend to predict a future value.

TRY:

Use the line graph and table to “predict” the number of employees in the year 2005.



<u>Year</u>	<u>Number of employees</u>
2002	1,506,781
2003	1,471,449
2004	1,446,766
2005	