

# Survey Results & Analysis

for

## Math 103 Labs: End of Term Survey

Saturday, November 06, 2010  
Powered by Vovici EFM  
[www.vovici.com](http://www.vovici.com)

## Executive Summary

This report contains a detailed statistical analysis of the results to the survey titled *Math 103 Labs: End of Term Survey*. The results analysis includes answers from all respondents who took the survey in the 20 day period from Monday, April 05, 2010 to Saturday, April 24, 2010. 107 completed responses were received to the survey during this time.

# Survey Results & Analysis

**Survey:** Math 103 Labs: End of Term Survey

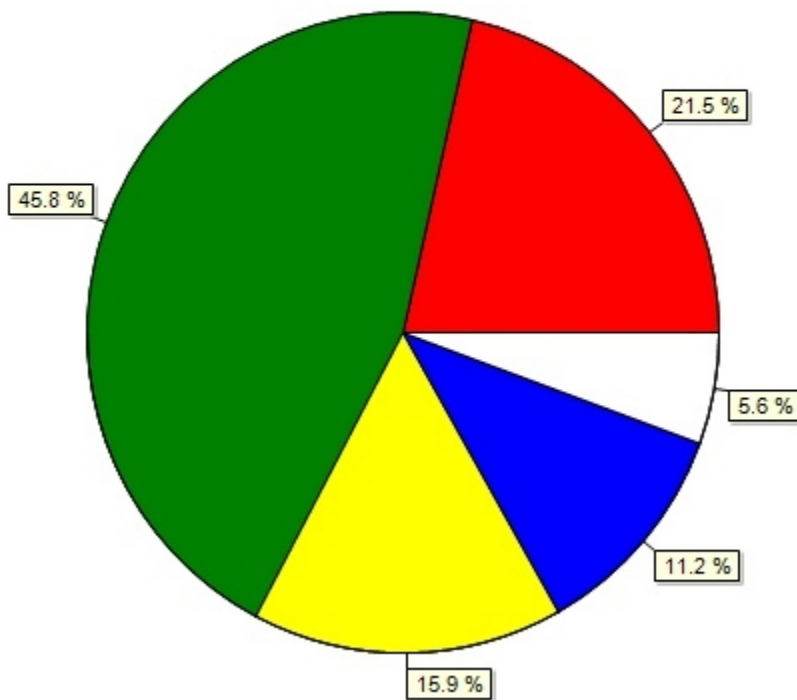
**Author:**

**Filter:**

**Responses Received:** 107

1) The instructions of the lab were clear and easy to follow.

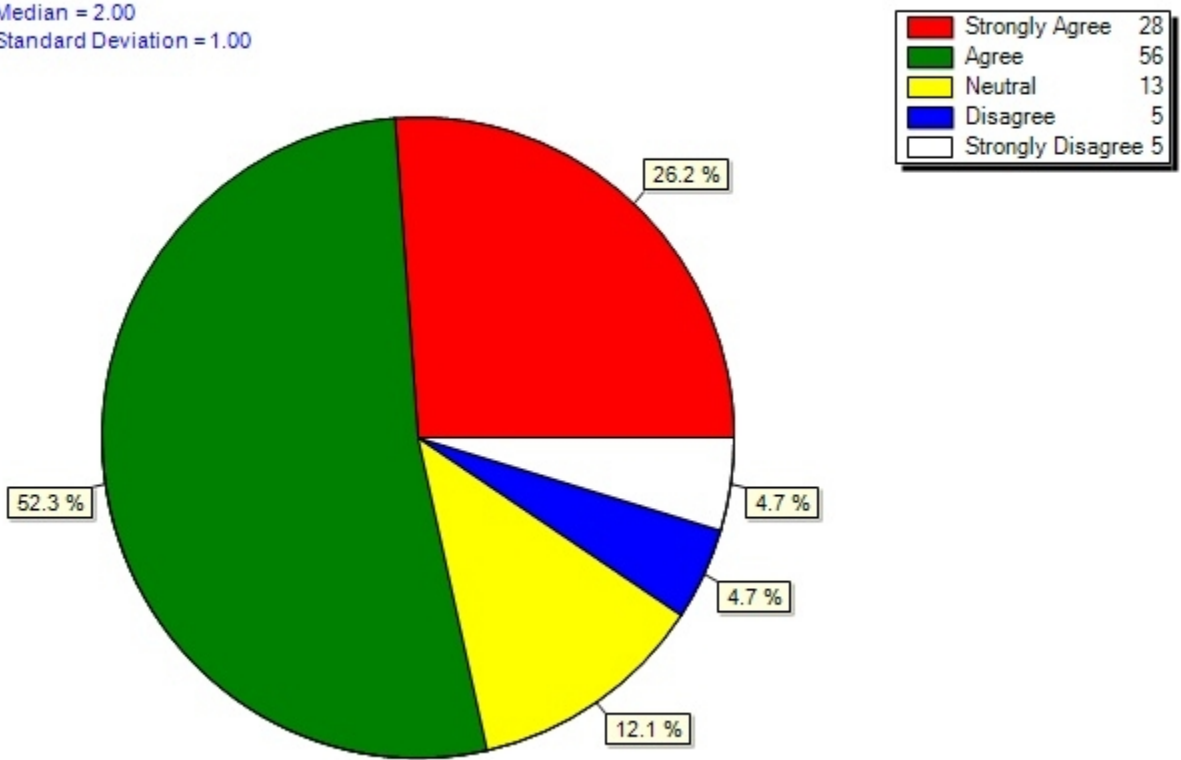
Mean = 2.34  
Median = 2.00  
Standard Deviation = 1.11



Strongly Agree	23
Agree	49
Neutral	17
Disagree	12
Strongly Disagree	6

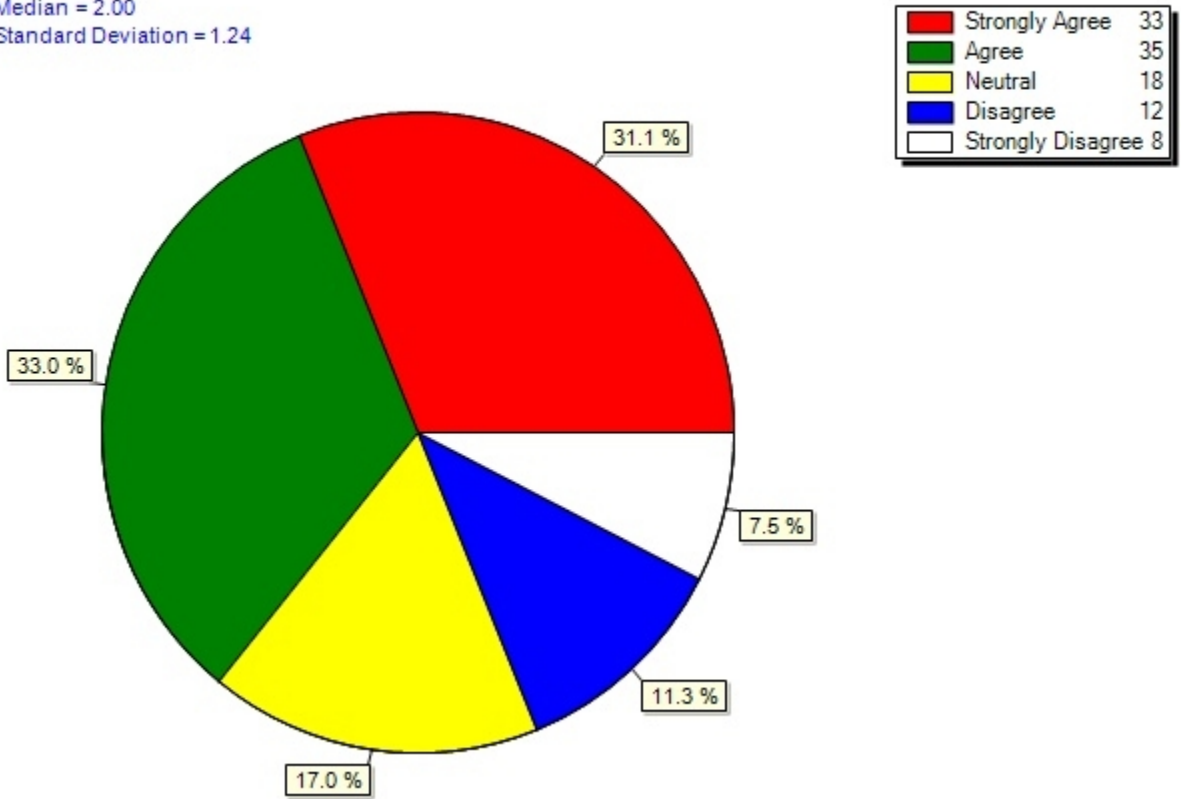
2) The learning goals of the lab were clear.

Mean = 2.09  
Median = 2.00  
Standard Deviation = 1.00



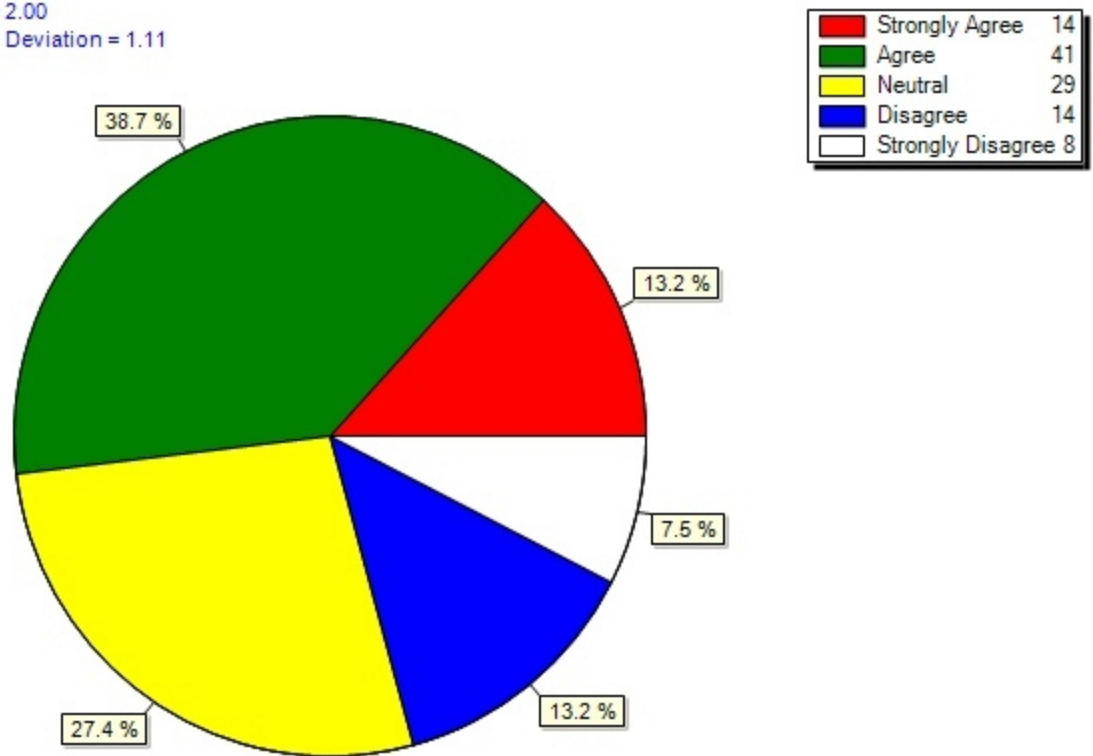
3) I found the lab useful in learning the material of the course.

Mean = 2.31  
Median = 2.00  
Standard Deviation = 1.24



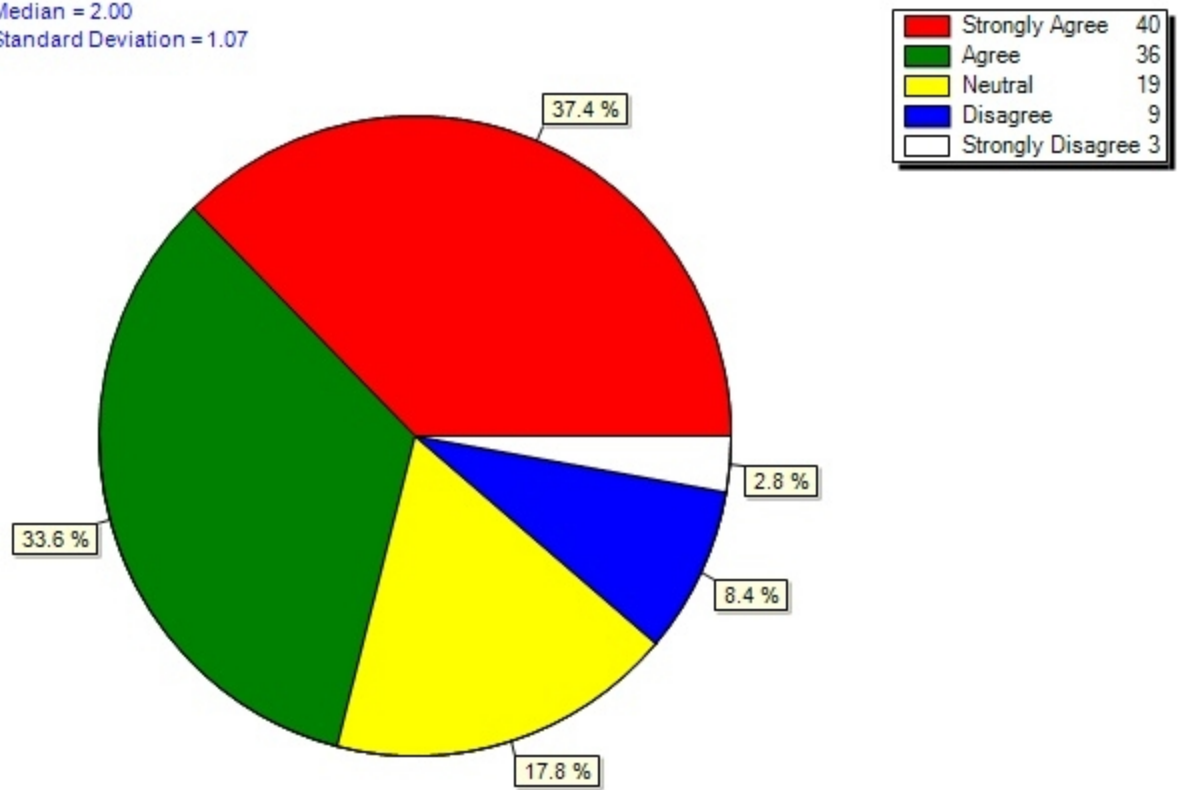
4) The lab was interesting.

Mean = 2.63  
Median = 2.00  
Standard Deviation = 1.11



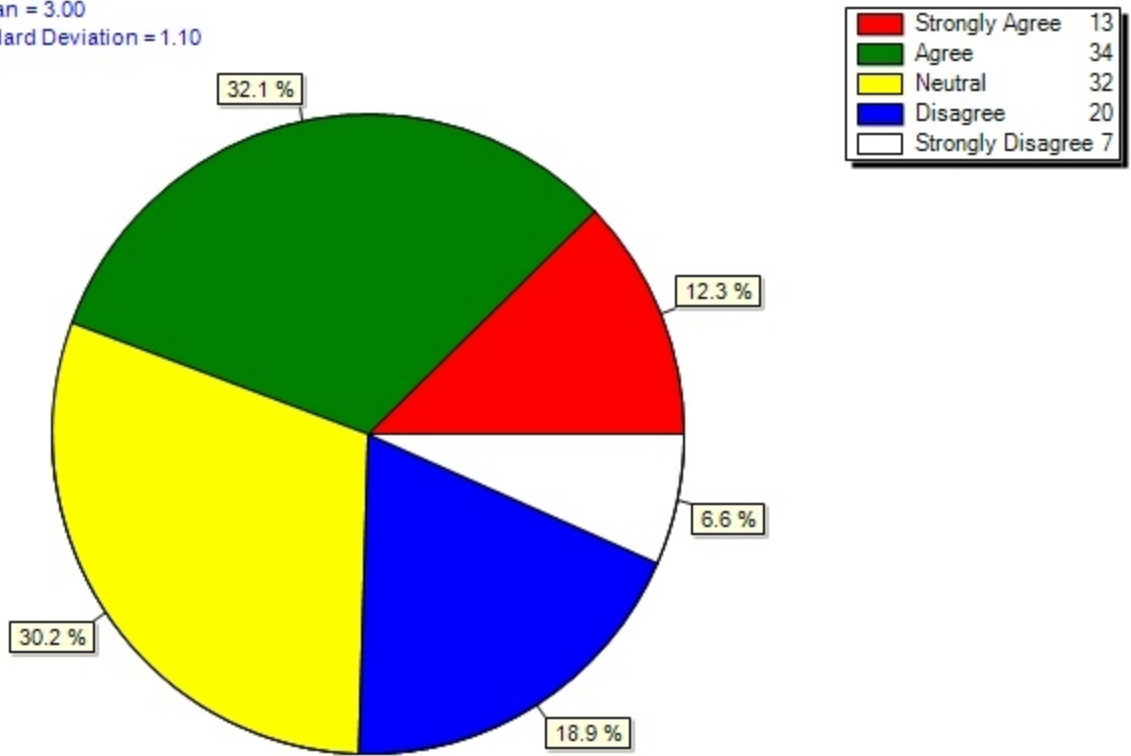
5) My only motivation for completing the lab was earning marks toward my final grade.

Mean = 2.06  
Median = 2.00  
Standard Deviation = 1.07



6) The lab problems provide useful practice for solving problems on homework/tests.

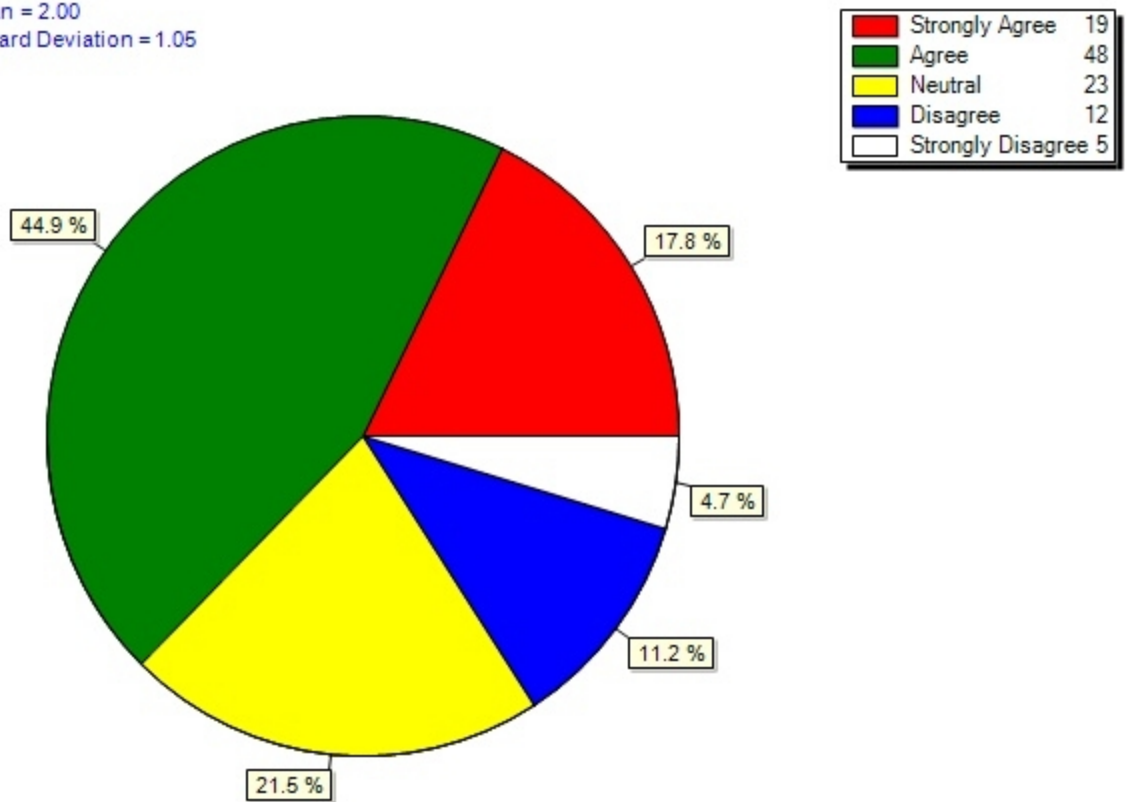
Mean = 2.75  
Median = 3.00  
Standard Deviation = 1.10



7) Completing the labs helped me understand the concepts covered in class.

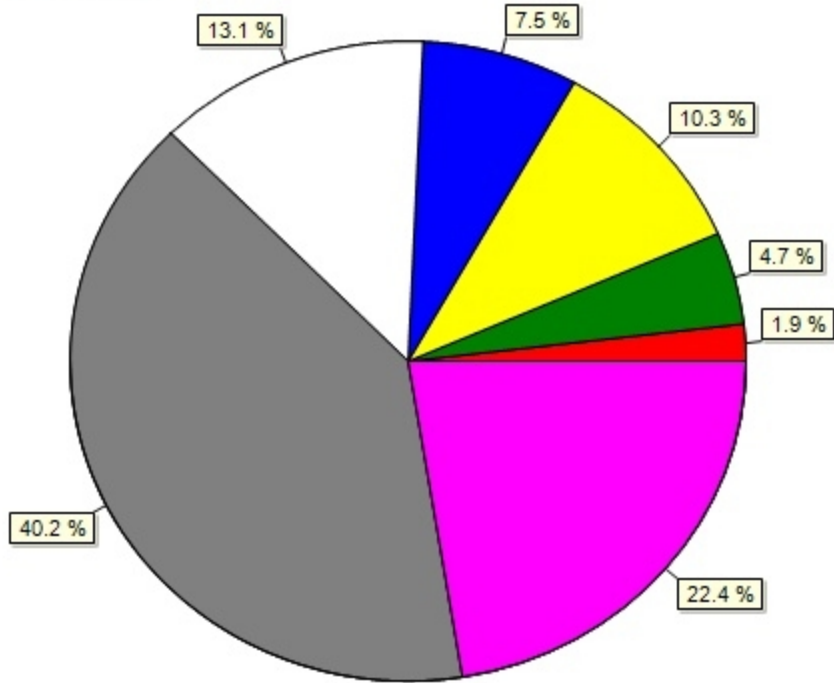


Mean = 2.40  
Median = 2.00  
Standard Deviation = 1.05



8) Which lab, if any, helped you understand an important concept you may not have understood otherwise. If there was more than one, pick the most useful.

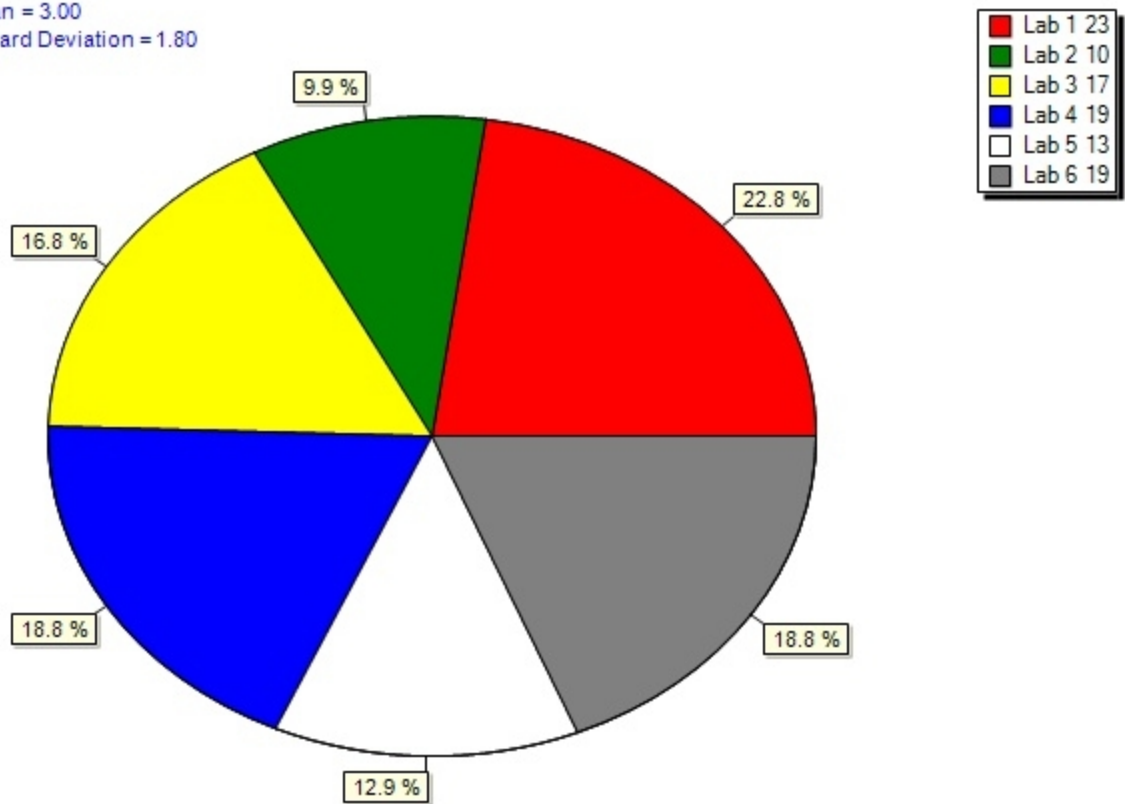
Mean = 5.36  
Median = 6.00  
Standard Deviation = 1.55



Lab 1	2
Lab 2	5
Lab 3	11
Lab 4	8
Lab 5	14
Lab 6	43
None of them	24

9) Which of the labs was the least useful?

Mean = 3.46  
Median = 3.00  
Standard Deviation = 1.80



10) Regarding question 9, why was this lab the least useful?

Regarding question 9, why was this lab the least useful?
did quite get what to do
It was easy.
It seemed really similar to that of lab 2
I don't know when I'll need to use Taylor Polynomials in a real life situation.

Lab 1 was done as an introduction to mathsheets for those who have not taken Math102, rather than a tool for better understanding of the course material.
It was too easy, very similar to the 2nd one.
The instruction is little confusing
I didn't quite understand the concept involved in the lab.
I have learned this in term 1.
Too simple, and I already understood the topic.
Because it's the material from last term.
It was really confusing, and was not directly related to the material covered in class
I found it very confusing and it made me more confused on the topic at hand. Also the teacher that was helping me wasn't answering the question I was asking therefore overall the lab was very frustrating for me.
I didn't see any questions relating to lab 4 on the exams.
It didn't really teach, it was just more plugging in confusing numbers. Like in a problem, it would have been easy to answer, but to graph it out was more difficult than it's worth.
This lab was based on a topic that was easily understood in class
This lab didn't help with understanding the concepts, it was simply a lab to understand how to use the program.
Too straightforward and the concepts are more of a prerequisite to course.
too confusing
There seemed to be no point.
lab was pretty much the same as the first one
the hardest. nowhere to use it
A lot of plugging in numbers, no new concepts from Term 1 math 102
It was not very clear as to what we have to do.
I felt it was pretty basic and not very challenging (i.e. learning anything new). It was good because it introduced me to Mathsheets, but for content, wasn't particularly helpful.
first time to make a bar chart
Never used it in class
I don't feel that Taylor polynomials was a big enough part of the course to dedicate a lab to it. Considering there are only 6 I feel like more important topics such as differential equations could've been covered.
It didn't really emphasize any one concept we were learning.
It was very simple, and concepts were basic and a review from labs 1 - 3.
The sums were very hard to organize using the spreadsheets
I didn't understand it.

I felt it was least useful because it was very similar to other labs.
I think the concept was very clear in class. I don't think e would have needed to graph it out to learn it better.
I didn't understand the significance of the graphs.
Lab 3 seemed like a repeat of lab 2 in that riemann's sum was used.
didn't understand the question and how it relates to probability
I was well aware of the applications and relationship between acceleration, velocity and position, so I didn't learn much from doing the lab.
It wasn't. There just wasnt a choice that said "all labs were useful"
I did not learn anything new from the lab.
Because taylor series is a review from last term math 184
This lab did not make any sense to me, I had to ask the TAs how to do everything.
I thought all of the labs were useful (including the one I selected to be least useful).
Small section that was easily covered in class.
It mostly seemed like review from lab 1.
I feel like I understood the concepts already, before I did the lab.
It was basically a continuation/reptition of previous labs. Please change some of the labs to give a bigger variety.
The concept was easy enough to understand that the lab was useless.
I'm just choosing this one because I don't have the choice of selecting "none."
Didn't really explain any concepts further than we had already done in math 102.
We hadn't learned the concept in class so it was hard and what we learned was slightly different.
Didn't learn how to find the arclength of a curve in class :/
I think all the labs were quite useful. But lab 1 was the easiest one.
because I didn't feel like I learned anything from it
I think it was just a small portion of the class and it was not the major topic I think.
not the focus of course
I already understood the concepts without having to do the lab.
The difficult part was not the math, but how to input it into the program.
amazing tedious
It was still useful, the other labs just helped me more to visual new concepts.
unsure about the relationship between functions
This lab was not very useful because I understood it during my lecture since my professor taught it very well.

Basic concepts of math sheet
I didn't understand it.
Because I did not understand the concept well
I found the directions for this lab were confusing and difficult to follow.
Because it is too easy.
The instructions were straightforward and the material covered in that lab was very basic.
It was just creating simple bar graphs and adding them up. Yes, you get to learn how to use the program with this lab, but I think this could have been combined with some other topic...
Did not seem to relate with what we were learning
It didn't seem to help with the course outline much.
It was unclear what was being asked and it only confused me more in carrying out the lab.
I found I spent more time trying to figure out how to graph the function, and less time actually learning anything about the mathematical ideas.
Because the concept itself is easy to understand so the lab doesn't help that much.
Not that it wasn't helpful, but comparatively, the other labs were more helpful since the material on lab 3 was already covered in 102
The concept was already quite easy to understand so the lab was not quite as useful as the other ones in helping to clarify confusing concepts.
Well, not that it was not useful, it was just that, sums to me, don't seem so important, even though they are more or less the basis for integration, couldn't we just jump to some integration instead?
i did not actually learn anything, other than how to use math sheet app properly. All the labs were not helpful for me, it felt as though the main point behind these labs were to learn how to use math sheet
b/c I already knew the relationship between acceleration, velocity, and displacement.
The connection between the curriculum material and the lab content was not clearly explained or emphasized.
I didn't really understand how to calculate the median and this lab didn't help me understand it any further
IT IS STRAITFORWARD AND ALMOST SAME AS THE FIRST LAB
to be honest, they were all least useful

11) Each lab focused on a specific topic: Lab 1: Computing sums and creating simple bar graphs  
 Lab 2: Approximating areas  
 Lab 3: Acceleration, velocity, displacement  
 Lab 4: Calculating the length of a curve  
 Lab 5: Probability density and cumulative distributions  
 Lab 6: Taylor Polynomials  
 Which other topic, if any, covered in the course would you recommend to be included in the labs?

Each lab focused on a specific topic: Lab 1: Computing sums and creating simple bar graphs Lab 2: Approximating areas Lab 3: Acceleration, velocity, displacement Lab 4: Calculating the length of a curve Lab 5: Probability density and cumulative distributions Lab 6: Taylor Polynomials Which other topic, if any, covered in the course would you recommend to be included in the labs?
-
N/A
Rotating volumes.
Probability density and cumulative distributions, and taylor polynomials are very helpful.
Nothing, I think the main parts were all covered.
None
N/A
None
none.
Volumes
None
Volumes of revolution.
None.
none
none
I felt all of them were extremely helpful. I REALLY enjoyed the labs. They weren't difficult (ample time, helpful TA's), but they were incredibly enriching to do and really helped me to understand the material we were learning in class. The only suggestion I would have is to change some of the usability of MathSheet (like when you print, it automatically closes) and just have more labs in general (I loved doing them - I'd often do more than just my problem set to get a lot of practice) but more math labs on different subjects would be nice. I feel

something that relates Lab 5 (means, medians) to centre of mass, etc would be helpful.
no
Differential equations.
I felt that all that needed to be/could be covered in the las was!
No comment.
I think more graphs on probability would have been helpful. But these are pretty good already. Thank you!
Something with convergence/divergence, if that is possible?
those were good topics, focuses on course material
Perhaps a density lab would also help. There seemed to be a lot of questions that dealt with population, and a lot of people are more unfamiliar with this topic (than acceleration, velocity and displacement)
Probability
infinite series, differential equations
Calculating the Volume of an object by rotating about the x or y axis.
rotation of a function about an axis
N/A. The topics chosen were the main ideas covered already.
A mass density problem.
None, I think it's good the way it is.
Calculating volumes
Lab 6: Taylor Polynomials because math 102 last term did not test Taylor series so I wasn't familiar with the material, therefore I found the lab useful.
These were good labs
All of them.
none
The last topic, harmonic Series
volume of revolutions
I think the most important topics have been covered.
something like the growth of a colony of bacteria in a petri dish
Differential equations
lab2, 3 and 6
I think that the most important topics have been covered and thus, no other topics are required.
n/a
I think the labs covers pretty much all topics
Rates of change (ie birth vs death and hormone level in the body), or volumes of solids of revolution.



None.
None, the topics covered in the labs were the major topics of the course.
Differential Equations
N/A
n/a
Density
none
That already covers a lot of important concepts !
Something on differential equations might be interesting
CALCULATING THE VOLUME OF 3D OBJECT
None

Generated: 11/6/2010 1:02:01 PM