

Math 1552 Section 16  
Survey Questions  
Monday August 26, 2013

Name: \_\_\_\_\_

**Instructions:** Please answer the following questions. This is not a test; many of the questions don't even have a right or wrong answer. This is just to help me understand you better. You will get a few points of extra credit for answering these questions thoroughly and thoughtfully. Be sure to fill out both sides of the pages.

**Part I: General questions:** The purpose of these questions is to provide me with a basic knowledge of your background, academic goals, and current workload. This will help me to administer the course most effectively.

1. What math courses have you had in college? If this is your first college math course, what was your most advanced high school math course?
2. Why did you sign up for this course?
3. Do you plan to take additional math courses in the future? If so, which ones?
4. What other courses are you taking this semester? What is your total number of hours?
5. What subject are you currently majoring in and what are your career plans?

6. Do you have a job, and if so, how many hours per week do you work?
  
  
  
  
  
  
  
  
  
  
7. What do you hope to get out of this course?
  
  
  
  
  
  
  
  
  
  
8. Which topics in math do you like? Dislike?
  
  
  
  
  
  
  
  
  
  
9. Which topics in math do you think are your strongest, and what do you struggle with?
  
  
  
  
  
  
  
  
  
  
10. Describe what characteristics of a course would make you like or dislike it.

**Part II: Questions about your particular needs:** The purpose of these questions is to help me schedule convenient office hours and make necessary arrangements with other offices and services on campus.

11. Do you commute more than one half-hour to campus, or do you live locally?
  
  
  
  
  
  
  
  
  
  
12. If I held office hours either just before or just after class on Monday and Wednesday, would you be able to come during those times if you needed to ask questions?



19. State the chain rule for differentiation.
20. For what number  $n$  is the indefinite integral  $\int x^n dx$  not a polynomial?
21. Describe informally how you might calculate the volume of a solid of revolution.
22. Which function is its own derivative?
23. Under what circumstances is it necessary to use implicit differentiation?
24. What is L'Hôpital's rule?
25. Why is the function  $\sin^{12}(x) \cos(x)$  easier to integrate than the function  $\sin^{12}(x)$ ?
26. How is the arc-length formula related to the Pythagorean Theorem?

27. What is the formula for integration by parts?
28. Write the rational function  $\frac{2x + 1}{x^2 + x}$  as a sum of two fractions with constant numerators and linear denominators.
29. What is the difference between a sequence and a series?
30. Is it possible for the sum of an infinite number of positive real numbers to be finite? If so, can you give an example? If not, why not?
31. What is a geometric series?
32. What is a vector?
33. If a point in the plane has rectangular coordinates  $(1, 1)$ , what are its polar coordinates?
34. What is the difference between  $\frac{df}{dx}$  and  $\frac{\partial f}{\partial x}$ ?