August 31, 2001

## Study Group Members

## Name

Directions: Be sure to include in-line citations, including page numbers if appropriate, every time you use the results of discussion, a text, notes, or technology. Only write on one side of each page.
"Obvious" is the most dangerous word in mathematics." - Eric Temple Bell

## Problems

1. There are many ways to define (or compute) area. Illustrate your understanding of the notation and method used in Section 2 of Chapter 5 by using the appropriate limit to compute the area of the region between $x=1$ and $x=5$ that is bounded below by the $x$-axis and above by the graph of the curve $y=x^{3}-1$.
2. The first few terms of a certain sequence are: $3,-3,5,69,255,653,1377,2565,4379,7005, \cdots$. Using $a_{1}=3, a_{2}=-3, a_{3}=5$, etc., determine a formula for $a_{n}$.
