## Math 120 Spring 97

## Quiz 1

Ron Buckmire

Name: $\qquad$
$\qquad$
Math 120
Date:
Time Begun: $\qquad$ Friday January 23, 1998

Time Ended: $\qquad$

## Topic covered: Applications of accumulation

## Instructions:

1. Once you open the quiz, you have 60 minutes to complete it.
2. You may not use the book or any of your class notes, but you may use a calculator. You must work alone.
3. If you use your own paper, please staple it to the quiz before coming to class. If you don't have a stapler, buy one.
4. After completing the quiz, sign the pledge below stating on your honor that you have adhered to these rules.
5. Relax and enjoy...
6. This quiz is due on Monday, January 26, in class. NO LATE QUIZZES WILL BE ACCEPTED.

Pledge: I, $\qquad$ pledge my honor as a human being and Occidental student, that I have followed all the rules above to the letter and in spirit.

## SHOW ALL YOUR WORK

1. ANOTHER EXAMPLE - DISTANCE FROM RATE AND TIME.

You're riding a bicycle a long a flat highway. After riding three miles, you settle into a steady pace of 10 miles per hour. Two hours later, how much further have you ridden? How far are you from your starting point?

## 2. LIFE IS NOT ALWAYS CONSTANT.

You're running a sprint, so your speed increases from the start to the finish of the race. The graph below shows your speed during the race. The table shows your speed at certain times.

| Time $T(\mathrm{sec})$ | Speed $S(T)(\mathrm{m} / \mathrm{sec})$ |
| :---: | :---: |
| 0 | 0 |
| 5 | 5 |
| 10 | 7 |
| 15 | 8 |
| 20 | 9 |

Compute your average speed during the entire race.

Plot a graph of the distance $D(T)$ travelled over time.

