## Math 125: Calculus II <br> Dr. Andy Loveless

## Exam Dates:

Exam 1: Thurs, April $21^{\text {th }}$
Exam 2: Thurs, May $19^{\text {th }}$
Final: $\quad$ Sat, June $4^{\text {th }}$ (1:30-4:20)

First Homework:
Due Wed, Apr 6
HW_1A, HW_1B, HW_1C which cover 4.9, 5.1 and 5.2

What we will do in this course:

1. Ch. 5: Define Integrals.
2. Ch. 6, 8, 9: Applications.
3. Ch. 5, 7: Evaluation Methods

### 4.9 Antiderivatives

Idea: Harry gives the velocity function for some object. What is the original function for the position of the object?

In other words: Given $g(x)=f^{\prime}(x)$, what can you say about $f(x)$ ?

Def' n : If $\mathrm{g}(\mathrm{x})=\mathrm{f}^{\prime}(\mathrm{x})$, then we say
$g(x)=$ "the derivative of $f(x)$ ", and $f(x)=$ "an antiderivative of $g(x)$ "

