

# MATH 152

## Today

1. WeBWorK/Questions
2. Review for Final

### Goals:

1. Review for final (Understand everything)

## Where is today's material used?

1. All of the sciences and mathematics, as well as economics

## Review

1. Parametric curves: graphs, tangents
2. Definite integrals: definition, interpretation, calculation (FTC 1 and 2!)
3. Indefinite integrals: families of antiderivatives
4. Techniques of integration: Recognition,  $u$ -substitution, integration by parts, trig integrals, trig substitution, and partial fraction decomposition
5. Applications of integration: volume, surface area, arc length, work
6. Polar coordinates: conversion from/to Cartesian coordinates, polar curves, tangents to polar curves, polar area

## Next Time

1. Final exam!