

## **Topics for Chapter 6/7 Review Test**

### 1) Techniques of Integration

- a) Substitution
- b) Integration by Parts  $\int u dv = uv - \int v du$
- c) Solving Separable Differential Equations

### 2) Areas and Volumes

- a) Areas between curves using both vertical( $dx$ ) and horizontal( $dy$ ) rectangles
- b) Applications of areas between curves; velocity, displacement, distance, etc.
- c) Volumes of Solids of Revolution: Disks, Washers, and Shells
- d) Volumes of known cross-sections(surface area  $\times dx$ )

You may use a half sheet of paper front and back filled with notes written for you and by you. No photocopies or typewritten note sheets. They must have your name on them and be turned in with the test. Calculators are allowed.