

**MATH 101 Section S11N01**  
**Calculus for Engineering**  
**and Physical Sciences II**  
**Jan - Apr 2011**



### **Topics for Test 3**

Test 3 will be on Wed Apr 27 during our regular class time. The test will have 6 multi-part questions and you will have 80 minutes to write the test.

- ◆ Questions one and two will cover basic techniques of integration:
  - 5.5: Substitution Rule
  - 6.1: Integration by Parts
  - 6.2: Trigonometric Integrals and Substitutions
  - 6.3: Partial Fractions
  - 6.5: Approximate Integration (Midpoint, Trapezoid, Simpson's Rule)
  - 6.6: Improper Integration

To review these topics refer to the suggested practice material for Test 2.

- ◆ The remaining questions will be on material covered after Test 2:
  - 7.3: Volumes by Cylindrical Shells
  - 7.4: Arc Length
  - 7.5: Applications to Physics and Engineering (Work and Pressure)
  - 7.6: Differential Equations
  - 8.2, 8.3, 8.5, 8.7, 8.8

I will post suggested review material and a practice tests by Wed Apr 20.