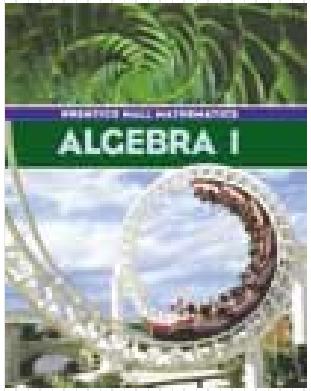
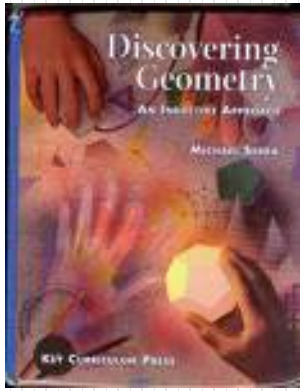
Mr. Northcutt's Math Classes
Class Presentation

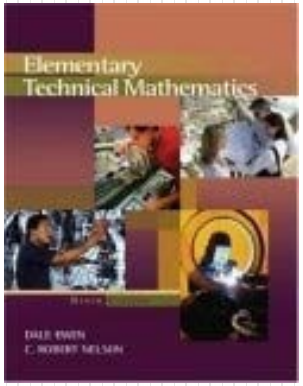
April 8, 2009 (133)



Math 1



Math 2



Applied Math

Math 1 – Daily Summary

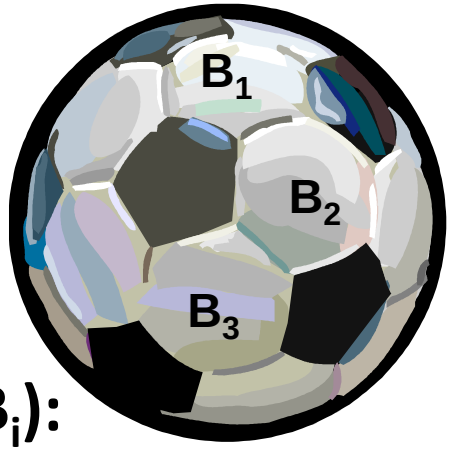
- **Announcements**
  - I have Bus Duty - will not be in room until 3:45!
  - QUIZ: Sections 7.1 thru 7.4 Tomorrow!
- **Class Objectives – *What you should learn today!***
  - Application of Systems of Equations ("Word Problems")
- **Assignment**
  - **Worksheet**: Applications of Systems of Equations II

See example problems from worksheet!

Math 2 – Daily Summary

- **Announcements**
  - I have Bus Duty - will not be in room until 3:45!
  - TEST: Chapter 11 (Volume) on Monday (4/13).
- **Class Objectives – *What you should learn today!***
  - Calculating the Surface Area of a Sphere
- **Assignment**
  - **Lesson 11.8**: 1-7, 9

Imagine a Soccer Ball…



- **But with a 1000 "pieces" on the surface…**
- **Let each piece have area B_i…surface area is:**

$$S = B_1 + B_2 + B_3 + \ldots + B_{1000}$$

- **Volume of sphere is sum of pyramids (base B_i):**

$$V = \frac{1}{3}RB_1 + \frac{1}{3}RB_2 + \frac{1}{3}RB_3 + \ldots + \frac{1}{3}RB_{1000} = \frac{4}{3}\pi R^3$$

$$= \frac{1}{3}R(B_1 + B_2 + \ldots B_{1000})$$

$$\frac{4}{3}\pi R^3 = \frac{1}{3}RS \Rightarrow \boxed{S = 4\pi R^2}$$

Surface Area of a Sphere

- **Sphere Surface Area Conjecture**
  - The surface area (S) of a sphere with radius *r* is given by:

$$S = 4\pi r^2$$

Applied Math – Daily Summary

- **Announcements**
  - I have Bus Duty - will not be in room until 3:45!
  - TEST: Chapter 9 (Systems of Equations) on Wednesday (4/15 - next week).
- **Class Objectives – *What you should learn today!***
  - Solving Systems of Equations by Elimination
- **Assignment**
  - **Worksheet**: Solving Systems by Elimination

See example problems from worksheet!