

LESSON 1: Introduction to Mathematical Modeling I

OBJECTIVES:

Be able to answer the following:

1. What is a mathematical model? What is meant by mathematical modeling?
2. What are some of the things you should consider when solving a problem?
3. Why must military officers be good problem solvers?

READ:

1. The introductory letter from the Program Director [MA103 AY09-02 PD Memo](#)
 2. The Course Introduction.
 3. Section 1.1.1 – 1.1.2 in Modeling in a Real and Complex World.
- Find and bookmark the course webpage.

<http://www.dean.usma.edu/departments/math/courses/ma103>
 - Inventory your book issue and laptop for the following items and bring them to class:

References:

- a. James Stewart's Calculus, Early Transcendentals – Known henceforth as Stewart Text.
- b. Modeling in a Real and Complex World
- c. Algebra II CliffsQuickReview.

Software:

- a. *Mathematica* – Wolfram 6.0
- b. *Word* – Microsoft
- c. *Excel* – Microsoft