

# **Mathematical Connections A Modeling Approach To Finite Mathematics Vol Ii Preliminary Edition**

**Mathematical modelling in the context of problem solving**

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Mathematical Modelling Approach in Mathematics  
Education**

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NCTM defines mathematical connections in Principals and Standards for School Mathematics as the ability to “recognize and use connections among mathematical ideas; understand how mathematical ideas interconnect and build on one another to produce a coherent whole; recognize and apply mathematics in contexts outside of mathematics.” (64)

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Mathematical modeling is a principled activity that has both principles behind it and methods that can be successfully applied. The principles are over-arching or meta-principles



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A mathematical model is a description of a system using mathematical concepts and language. The process of developing a mathematical model is termed mathematical modeling. Mathematical models are used in the natural sciences (such as physics, biology, earth science, chemistry) and engineering disciplines (such as computer science, electrical engineering), as well as in the social sciences (such as economics, psychology, sociology, political science). A model

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The textbook covers the concept of derivative using models including discrete and continuous ones. This is a great idea for those students in life sciences who have ever made the connection between mathematics and other fields. [read more](#)

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