Mathematical Thinking in Context Pathway

Learning Outcomes

Mathematical Thinking in Context Learning Outcomes	**Bennett/Briggs *Using & Understanding Mathematics* 8e Coverage of Outcomes**
Determine efficient means of solving a problem through investigation of multiple mathematical models.	Chapter 2: Approaches to Problem Solving
Apply logic in contextual situations to formulate and determine the validity of logical statements using a variety of methods.	Unit 1B: Propositions and Truth Values Unit 1D: Analyzing Arguments
Apply mathematical concepts visually and contextually to represent, interpret and reason about geometric figures.	Chapter 10: Modeling with Geometry
Apply mathematical models to civically contextual situations (e.g., stocks, finance, voting, population dynamics, etc.).	*Stocks & Finance*: Chapter 4: Managing Money *Voting*: Chapter 12: Mathematics and Politics *Population Dynamics*: Chapter 8: Exponential Astonishment
Recognize the characteristics of numbers and utilize numbers along with their operations appropriately in context.	Included throughout the text. Brief Review boxes focus on specifically necessary prerequisite content. The Brief Review boxes are listed in the table of contents throughout the text.
Organize, visualize and model data in a meaningful way.	Chapter 5: Statistical Reasoning Chapter 9: Modeling Our World
Analyze and interpret representations of data to draw reasonable conclusions.	Chapter 3: Numbers in the Real World
Engage in ways of thinking that may involve sample size, counting strategies, chance, ratios and proportions.	Chapter 6: Putting Statistics to Work Chapter 7: Probability: Living with the Odds