Suggested Outline for a Two-Semester Course

Foundations for College Mathematics 3e

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Explorations, Concept Quizzes, Investigations, Modeling Projects for Foundations for College Mathematics 3e

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See the "Philosophy and Use" document for teaching ideas.

Explorations, concept quizzes, investigations, and modeling projects can be assigned as individual work or preferably as group work. Students tend to have a better understanding if done in a group setting. Consider giving group work, sometimes in class and sometimes out of class. There are advantages to both. Modeling projects are a prime candidate for being done outside of class. Suggestions are made below on the timing of when an exploration, concept quiz, or investigation should be assigned. In some cases they are tools for teaching a concept and can be used to prime students for content taught in class.

Textbook exercises numbered from -4 to -1 may be assigned if you want your students to start thinking about future topics, but they are in the teacher ancillary as discussion questions and might better be used to start a lesson – as a classroom discussion at the beginning of a topic. They are in a different order in the ancillary and are grouped by topic. Exercises 1 – 6 are review of the three previous sections. Exercises 1 – 3 are from the previous section, Exercises 4 and 5 are from the section before that, and Exercise 6 is from the third section previous. If there are a related series of exercises near the end of the exercise set, they are probably in the ancillary materials as a concept quiz, exploration, or investigation. The textbook writing exercises are not in the ancillary materials. As you will note, there are many open-ended exercises in the exercise sets. This makes it difficult to include answers to them in the answer key in the back of the text.

As you will see below, I usually recommend assigning all of the exercises. If you can do so, please do likewise. Sometimes it can't be done. Something else to consider is assigning reading the pages dealing with brain function early in the course.

Texas Instruments TI-83/84 Plus calculator programs store all the data sets found in *Foundations* as well as the *Explorations…* ancillary. They are provided on the ancillary CD. You can transfer them to your calculator using the cable and software from TI. There are two separate sets of data programs. The student version contains the data and brief description. The teacher versions contain possible models for the data. All come as calculator programs. Simply run the program and the data is transferred to the calculator L_1, L_2, etc. for as many lists as needed (usually two). The data sets are also available as documents for the TI-nspire™.

Below you will find a suggested outline for 154 days. This will allow for state testing and other required uses of class time during the academic year. If you maintain the listed schedule, consider adding more time for the e-activities and modeling project discussions in class. You will find suggested chapter and section assignments and ancillary assignments from the book *Explorations, Concept Quizzes, Investigations, Modeling Projects for Foundations for College Mathematics 3e*. However, you will need to look at the file called "TI Study Card Stack Setup and Use" for e-based activities that help facilitate the use of the enriched teaching/learning environment needed for correct long-term memory of the mathematics taught.

Chapter One (10 traditional class periods)

Section	Topic	Assignment from text	Assignment from student activity book	Notes
1.0, 1.1	Review 1.0 and start real number properties.	Exercises 1 – 6 should always be assigned. They are a review of the 3 previous sections. (except in Sections 1.1 – 1.3) Assign 1 – 14, 37, and 38.	Assign the Exploration at the **beginning** of class if students have studied the field properties before. Another choice is to use the *e*-lesson "Real # Properties."	Use the calculator home screen and do calculations that confirm each property, or discover that the statement is false. Consider showing/discussing the content on pages vii-viii of *Foundations 3e*.

Section	Topic	Assignment from text	Assignment from student activity book	Notes
1.1	Continue with real number properties and start equality properties	Assign 15 – 21, 42 – 44.	Investigation	Use the calculator home screen if needed
1.1	Finish equality properties and inequality properties	Assign 22 – 36, 39 – 41, 45 – 49 (if students keep a portfolio or journal), 50 – 56.	Concept Quiz	Use the calculator home screen if needed. Consider showing/discussing the first section of the Power Point "Brain Function & Learning."
1.2	Single variable data	Assign 1 – 14, and at your discretion, 15 – 22.	Exploration 1 and/or 2	Use the calculator extensively to operate on a list of data. Use meaningful data from an external source like newspaper or the web. Consider showing/discussing the next part of the Power Point "Brain Function & Learning."
1.3	Interval Notation	Assign 1 – 33, 41 – 46, 52 – 54, and 47 – 51 for a journal or class discussion after assigned.	Exploration and/or Concept Quiz and/or Investigation. Another choice is to use the *e*-lesson "IntervalNotation."	Since students will encounter many data sets, and data sets consist of individual sets of numbers (domain & range) we must have a method for describing sets of numbers. It is also important to emphasize the differences between discrete and continuous sets of numbers. Consider showing/discussing the next part of the Power Point "Brain Function & Learning."
1.4	Scientific notation	Exercises 1 – 35, 37, 40 – 42, and 48 – 50. If you ask your students to keep a journal or if you monitor student progress using writing, consider assigning 43 – 47.	If your students already know a little about scientific notation, you may assign Explorations 1 and 2 **before** you teach Section 1.4. Assign the Concept Quiz and Investigation **after** you have taught 1.4. Another choice is to use the *e*-lesson "ScientificNotation" and "SciTifOperations."	Later material includes use of very large and very small numbers. Students must be able to use numbers expressed in scientific notation like found on the calculator. Consider showing/discussing the next part of the Power Point "Brain Function & Learning."

Section	Topic	Assignment from text	Assignment from student activity book	Notes
	Explorations, Concept Quizzes, etc. group work		Consider using the suggested *e*-lessons (TI-StudyCard lessons)	Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Explorations, Concept Quizzes, etc. group work		Consider using the suggested *e*-lessons (TI-StudyCard lessons)	Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter. Consider showing/discussing the next part of the Power Point "Brain Function & Learning."
	Chapter One review			
	Chapter One test			All chapter tests are designed to be taken with a graphing calculator. Don't forget that there is an extra chapter test in the teacher ancillary package.

Chapter Two (11 traditional class periods)

Section	Topic	Assignment from text	Assignment from student activity book	Notes
2.0 and 2.1	Data relationships – shape and increasing/decreasing	Assign -4 to 6 depending on your philosophy. Assign 7 – 31, and any of the writing/math exercises you choose.	Exploration homework (use LINE(from DRAW menu on calculator)	This is an extremely important section. It prepares students for the concept of function. This is central to the course of study. Use the calculator to show several relationships that are linear and then quadratic. Bring in extra data that is either linear or quadratic; such as using the CBR in several motion situations. The GOAL is to have students be able to classify data relationships by the shape of the graph. This will be used later in modeling projects. Consider showing/discussing the next part of the Power Point "Brain Function & Learning."

Section	Topic	Assignment from text	Assignment from student activity book	Notes
2.2	Symbolic form of functions	Assign -4 to 6 depending on your philosophy. Assign 7 – 12.	Assign the Exploration 1 (before unit is taught in class, or at the beginning of class)	It is crucial that students understand that the "symbols" we use in mathematics have a real-world connection. Developing the symbolic form through the list editor using pattern building will help the brain "understand" the meaning of symbols, variable, and function.
2.2	Definition of a function, and domain of a function	Assign 13 – 40, and if desired, 41 – 57.	Assign Exploration 2. Assign the Concept Quiz 2 and add the Investigation as a group quiz. Another choice is to assign the *e*-lesson "Domain & Range."	Students need to understand that there can be different domains for the same function. One in the context of mathematics and one in the context of the problem or situation the function models.
2.3	Geometric behaviors of functions initially based in a contextual situation to help memory and understanding.	Assign -4 to 6 depending on your philosophy. Assign 7, 30, and 31.	There are 7 explorations, 2 concept quizzes, and 2 investigations. Use as many as you can to develop a strong base in behaviors Explorations 1 and 2 may be assigned **before** the topic is taught in class. An additional option is to assign the *e*-lesson "Max/Min & Inc/Dec."	Understanding function behaviors is crucial to mathematically modeling, solving equations, and inequalities, and to all that follows in the text. Initially, describe function behaviors in context of a problem situation. Consider using the CBL and temperature probe to collect data of hot water cooling (in-class demo). Please DO NOT expect students to fully understand function behaviors yet. The topic is important and is taught again in several later chapters.

Section	Topic	Assignment from text	Assignment from student activity book	Notes
2.3	Behaviors of functions.	Assign 8 – 20, 26 – 29, and 32 – 34.	Explorations 3 and 4 (may also be assigned **before** topic is taught in class). An additional option is to assign the *e*-lesson "Change."	Not understanding function behaviors is like building a skyscraper without a foundation.
2.3	In class group work.		Use Exploration 7 and the Concept Quiz, Investigation 2. An additional option is to assign the *e*-lesson "Zero's, Pos & Neg."	Ancillary materials are an integral part of the learning process.
2.4	Graphs of functions, graphing with a calculator, and interpretation of a graph.	Assign -4 to 6 depending on your philosophy. Assign 7 – 41 as needed.	Assign, as appropriate, the exploration, concept quiz, and/or investigation,.	This section is the formal introduction to the meaning of a graph of a function.
	Explorations, Concept Quizzes, etc. group work.		Consider using the suggested *e*-lessons (TI-StudyCard lessons)	Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Explorations, Concept Quizzes, etc. group work.		Consider using the suggested *e*-lessons (TI-StudyCard lessons)	Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Chapter Two review.			
	Chapter Two test.			All chapter tests are designed to be taken with a graphing calculator. Don't forget that there is an extra chapter test in the teacher ancillary package.

Chapter Three (11 traditional class periods)

Section	Topic	Assignment from text	Assignment from student activity book	Notes
3.1	Behaviors of the linear function from contextual situations.	Assign 1 – 7, 28, 36 – 44, and 51 – 57.	Assign the Concept Quiz **before** the material is formally taught. Assign Investigation 1. An additional option is to assign the *e*-lesson "Behaviors-Linear."	It is important when teaching the behaviors of the linear function that you keep it intuitive and do not go into a deep discussion of the linear function. This is the content of Chapter 5. Consider using the CBL2/CBR2 to help students understand the behaviors.

3.1	Typical math examples of behaviors of the linear function.	Assign 8 – 27 and 45 – 50 if you ask your students to keep a journal.	Assign Exploration 1 and/or 2. An additional option is to assign the *e*-lesson "Change."	You are providing the need and existence for/of a linear function and the related symbolic form.
3.2	Behaviors of the quadratic function, initially from the contextual situations.	Assign 1 – 7, 25, 34 – 40, 48 – 50.	Exploration 2 or 3 and Investigation.	It is important when teaching the behaviors of the quadratic function that you keep it intuitive and do not go into a deep discussion of the function. This is the content of Chapter 10. Here, students must understand the need for the quadratic and of its existence.
3.2	Behaviors of the quadratic function while in general form.	Assign 8 – 24 and 41 – 47 if you ask your students to keep a journal.	Exploration 1, Concept Quiz. An additional option is to assign the *e*-lesson "Behaviors-Quadrati," and or "Create Quadratic."	Consider using the CBR2 to measure time and distance as you toss a ball upward over the CBR2 on the floor.
3.3	Behaviors of the absolute value function, initially in context.	Assign 1 – 24, 31 – 33, and 34 – 50.	Exploration 1 and/or 2. The Concept Quiz is good, but consider the Investigation too. An additional option is to assign the *e*-lesson "CreateAbsoluteValu."	May need to add another contextual example. Consider using the CBR2 and have a student walk away from and then immediately toward to CBR2 at constant rate. Here, students must understand the need for the absolute value function and of its existence.
3.4	Behaviors of the square root function.	Assign -4 to 6 depending on your philosophy. Assign 7 – 21 and if desired selected items from 32 – 49.	Explorations 1 and 2 are both good. I would also consider the Concept Quiz and Investigation. An additional option is to assign the *e*-lesson "Behaviors-SquareRt," and/or "CreateSquareRoot."	Now that behaviors have been presented numerous times, one day on this section should be sufficient.

Section	Topic	Assignment from text	Assignment from student activity book	Notes
3.5	Behaviors of the exponential function	Assign -4 to 6 depending on your philosophy. Assign 7 – 22, and if desired, 23 – 36.	Consider both the Exploration and Concept Quiz 1 and/or 2.	Now that behaviors have been presented numerous times, one day on this section should be sufficient. You may not want to dwell on the horizontal asymptote other than intuitively. It is developed fully in Chapter 7.
	Explorations, Concept Quizzes, etc. group work.		Continue with any activities missed above.	Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Explorations, Concept Quizzes, etc. group work.		Consider using the suggested e-activities (TI-StudyCard lessons)	Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Chapter Three review.			
	Chapter Three test.			All chapter tests are designed to be taken with a graphing calculator. There is an extra chapter test in the teacher ancillary package.
	Start a modeling project.		Pick one for all students or split the three projects among student groups.	The modeling projects are applications of mathematics taught. Further, they teach problem solving and use the scientific method as the tool for solving the problems. Since the modeling projects can take from 2 to 10 hours (depending on student ability), if students start them in class, they will need to finish them outside of class.

Chapter Four (13 traditional class periods)

Section	Topic	Assignment from text	Assignment from student activity book	Notes
4.1	Definition of function and introduction to function notation.	Assign 1 – 22 and 27 – 31.	Concept Quiz. An additional option is to assign the *e*-lesson "FunctionNotation."	Add contextual examples of functions or non-function relationship. Maybe use the CBL2/CBR2 to collect data. Note how it is a function. (Look at the lists of data.)
4.1	Function notation and composition of functions.	Assign 23 – 26, 32, 33, and 44 – 58. Assign 39 – 43 if you ask your students to keep a journal.	You may want to start the in class presentation with the Investigation and/or Exploration 1, (# 2 is optional).	Since the idea of function notation may be new, go slowly, especially for the composition of functions. You should use an additional contextual example.

Section	Topic	Assignment from text	Assignment from student activity book	Notes
4.2	Adding and subtracting polynomial functions.	Assign 1 – 17, 23, 24, and 30 – 39. Assign 25 – 29 if you ask your students to keep a journal.	Assign Investigation **before** Section 4.2 is taught in class. Assign Exploration 1, 2, and/or 3 and/or Concept Quiz. An additional option is to assign the *e*-lesson "PolynomialAddSubt."	Consider including another contextual example of adding and/or subtracting polynomial functions. Encourage students to check their pencil and paper algebraic work with the numeric representations of the problem and their answer. (Use TABLE)
4.3	Multiplying polynomial functions (in general).	Assign 1 – 17, 49 – 52, 60, 62, and 65 – 67.	Explorations 1, 2 and 3 should really all be assigned. They are crucial to students understanding factoring, as is Investigation.	Consider including another contextual example of multiplying polynomial functions. Encourage students to check their pencil and paper algebraic work with the numeric representations of the problem and their answer. (Use TABLE)
4.3	Special polynomial products.	Assign 18 – 44, 70, and 53 – 57, if you ask your students to keep a journal.	Assign Concept Quiz to help students see common errors. An additional option is to assign the *e*-lesson "PolynomialMult."	Encourage students to check their pencil and paper algebraic work with the numeric representations of the problem and their answer. (Use TABLE)
4.4	Common factors and factoring by grouping.	Assign 1 – 13, 20 – 23, and 46.	Exploration 1. In **preparation** for teaching factoring trinomials on one day, assign the e-lesson "Factoring-#1."	Factoring with pencil and paper is fine, but do not neglect the zeros-based (calculator) method. It may become the method of choice soon.
4.4	Factoring the difference of squares and zeros.	Assign 14 – 19, 24 – 37, 47 – 54, and 41 – 45 if you ask your students to keep a journal.	Exploration 2 and Concept Quiz. In **preparation** for teaching factoring trinomials on one day, assign the e-lesson "Factoring-#2."	Emphasize the zeros-based method, but don't ignore the pencil and paper method. Students can learn the pencil and paper method by using the zeros method.

Section	Topic	Assignment from text	Assignment from student activity book	Notes
4.5	Factoring trinomials.	Assign 1 – 25, 31 – 40, and 26 – 30 if you ask your students to keep a.	Exploration 1, 2, 3, and/or Concept Quiz. In **preparation** for teaching factoring trinomials on one day, assign the e-lesson "Factoring-#3" at the beginning of class.	Factoring by the zeros-based (function) method is used to develop the concept of factoring. This method is then used to help the student learn the pencil and paper method. As a result of using this approach, considerable time is saved. Further, the zeros-based method is much easier for students because they know the relationship between zeros and factors, and they have found zeros all through Chapters 2 & 3.
4.6	Sums and differences of absolute value functions and domains of sums involving square root functions.	Assign 1 – 20, 27 – 31, and 21 – 26 if you ask your students to keep a.	Exploration 1, and/or 2, Concept Quiz, and/or Investigation.	Section 4.6 is an extension of mathematics made possible because of the use of the graphing calculator. This section will help students with an application of the absolute value function found later in the text and initially promoted in Exploration 1 and in the modeling projects of Chapter Four. This section may be considered optional.
	Explorations, Concept Quizzes, etc. group work.		Consider using the suggested e-lessons (TI-StudyCard lessons)	Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Explorations, Concept Quizzes, etc. group work.		Consider using the suggested e-lessons (TI-StudyCard lessons)	Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Chapter Four review.			
	Chapter Four test.			All chapter tests are designed to be taken with a graphing calculator. Don't forget that there is an extra chapter test in the teacher ancillary package.
	Start a modeling project.			The modeling projects are applications of mathematics taught. Further, they teach problem solving and use the scientific method as the tool for solving the problems. Since the modeling projects can take from 2 to 10 hours (depending on student ability), if students start them in class, they will need to finish them outside of class.

Chapter Five (10 traditional class periods)

Section	Topic	Assignment from text	Assignment from student activity book	Notes
5.0, 5.1	y = notation. Rate of change, initial conditions, and the zero of the linear function.	Assign 1 – 31.	Investigation. You may also consider assigning this **before** the section is taught or at the beginning of class. Exploration may also be assigned. There are three e-lessons you may want to consider assigning before you do any direct teaching. They are "Behaviors-Linear," "Change," and "Slope."	Chapter Five is the formal study of the linear function. Now is the time to teach as much as you can about the linear function and its applications. You immediately notice the use of words not common in a traditional math classroom, but the choice of rate of change and initial conditions is in keeping with mathematics used in the real world. The transition is made to the slope and y-intercept, but Chapter Five is the only place they are used. When teaching new ideas, always try to introduce them in the context of problems, situations, or data. Added contextual data (and situation) can be obtained from using the CBR2 (or CBL2) to collect time-distance data of a person walking at a constant rate away from and/or toward the CBR2.
5.1	Applications of the linear function and converting to symbolic form.	Assign 32 – 42, 48 – 60, and 43 – 47 if you ask your students to keep a.	Concept Quiz 1 and/or 2.	Please add to the simple application examples. The formal topic of applications of the linear function is in Section 4, so keep the teaching somewhat intuitive and introductory.
5.2	Graphing the linear function with pencil and paper – slope-intercept method.	Assign 1 – 18, 24 – 35, and 19 – 23 if you ask your students to keep a journal.	Consider assigning the Exploration or Concept Quiz.	This is the only section that asks students to graph a function by hand.
5.3	Point-slope form of a linear function.	Assign 1 – 13, 15, 17, 27, 35 – 39, and 43 – 50.	Exploration 1 and 2 and/or Concept Quiz.	Find another contextual example to show the need for developing the symbolic form of the linear function by using the point-slope form. CBR2 data from walking at a constant rate should be ok. Do not use the initial condition (y-intercept).
5.3	Parallel and perpendicular lines and finish point slope form.	Assign 14, 16, 18, – 23, 28, 29, and 30 – 34 if you ask your students to keep a journal.	Assign the Investigation	Cover the investigation type exercises here by using a CBR2 linear data collection activity (like walking at a constant rate of change) or other type situation.

Section	Topic	Assignment from text	Assignment from student activity book	Notes
5.4	The linear function as a mathematical model.	Assign 1 – 11, 13, 20 – 24, and 15 – 19 if you ask your students to keep a journal.	Assign the Exploration and/or Investigation 1 and/or 2.	If all previous textbook material has been taught as suggested, students can build on these experiences to better solve the real world problems in this section. When a problem is based on data, traditionally taught students using traditional materials sometimes have a difficult time with the non-exact model of the data relationships.
	Explorations, Concept Quizzes, etc. group work.		Consider using the suggested e-lessons (TI-StudyCard lessons)	Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Explorations, Concept Quizzes, etc. group work.		Consider using the suggested e-lessons (TI-StudyCard lessons)	Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Chapter Review.			
	Chapter Five test.			All chapter tests are designed to be taken with a graphing calculator. Don't forget that there is an extra chapter test in the teacher ancillary package.
	Start a modeling project.		Assign Modeling 1 or 2.	The modeling projects are applications of mathematics taught. Further, they teach problem solving and use the scientific method as the tool for solving the problems. Since the modeling projects can take from 2 to 10 hours (depending on student ability), if students start them in class, they will need to finish them outside of class. Assign one project to all, or let students decide which to do.

Chapter Six (10 traditional class periods)

Section	Topic	Assignment from text	Assignment from student activity book	Notes
6.0, 6.1	Definition of an equation (6.0) and technology-based methods for solving linear equations.	Assign 1 – 16.	Concept Quiz. An additional option is to assign the *e*-lesson "SolveLinearEquatio."	Students, in effect, have been solving equations since the beginning of Chapter Two when they found zeros of functions. In this section, you will formalize the methods. The technology-based methods will be used throughout mathematics, not just for solving linear equations. Each of the four methods has value (pedagogical or mathematical). Eventually, students will settle in on the zeros or intersection methods, with most using the zeros method. It will be the task of the student to decide which method to use – based on the equation being solved.
6.1	Algebraic method for solving linear equations.	Assign 17 – 29, 38 – 55, and 33 – 37 if you ask your students to keep a journal.	Exploration 1, 2, and/or 3.	The algebraic method for solving a linear equation now has less importance. It is just one of five methods. Given equations from the real world, it is less likely to work. Decrease its importance, but do not eliminate it.
6.2	Solving linear inequalities.	Assign 1 – 24, 30 – 37, 44 – 48, and 38 – 43 if you ask your students to keep a journal.	Exploration and/or Concept Quiz, and/or Investigation. Each has its strength and learning value. An additional option is to assign the *e*-lesson "SolveInequalities."	Students have been solving inequalities since Chapter Two when they were asked to find when a function was above or below zero. Formalize the technology method and introduce the algebraic method. Like solving equations with algebra, the algebraic method is no longer as important in solving inequalities.
6.3	Absolute value equations and inequalities.	Assign 1 – 32, 39 – 45, 51 – 53, and 46 – 50 if you ask your students to keep a journal.	Explorations 1 or 2, and/or Concept Quizzes 1 or 2, and/or Investigation. Each has its strength and learning value. An additional option is to assign the *e*-lesson "SolveAbsValueEqn," and/or "Behaviors-AbsValue, and/or "CreateAbsoluteValu."	Solving absolute value equations or inequalities by the technology-based methods is not new. These methods will remain the same for all equations or inequalities. Teach the algebraic method. It is new. It is just one of several methods students can use.

Section	Topic	Assignment from text	Assignment from student activity book	Notes
6.4	Formulas.	Assign 1 – 19, 31 – 35, and 44 – 46.	Exploration and/or Concept Quiz and/or Investigation. Each has its strength and learning value.	Consider using the calculator to do the mathematical work with the formulas.
6.4	Direct variation.	Assign 20 – 30, 36 – 38, and 39 – 43 if you ask your students to keep a journal.	Consider assigning the *e*-lesson "Variation-Direct."	Use the calculator as appropriate.
	Explorations, Concept Quizzes, etc. group work.		Consider using the suggested *e*-lessons (TI-StudyCard lessons)	Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Explorations, Concept Quizzes, etc. group work.		Consider using the suggested *e*- lessons (TI-StudyCard lessons)	Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Chapter Six review.			
	Chapter Six test.			The Chapter Six test should be taken with a calculator. No need to administer parts without a calculator. This is true of all tests.

Chapter Seven (9 traditional class periods)

Section	Topic	Assignment from text	Assignment from student activity book	Notes
7.0, 7.1	The exponential function.	Assign 1 – 33, 49 – 51, 54, 55, and 57.	Concept Quiz 1, 2, 3, and/or 4. Consider assigning the *e*-lesson "Behaviors-Exp."	This section is the formal development of the exponential function. It provides evidence of the need and existence of the exponential function. You will note it is not directly connected to the log functions. It is important enough to stand alone. There is a new function behavior introduced – the asymptote. Please consider using the CBL2 and pressure sensor to explain the concept. When using the function approach to teaching algebra, each function is developed in symbolic form before any typical arithmetic operations upon these symbols takes place. Knowing the need for such symbols motivates the need for operations with the symbols.

Section	Topic	Assignment from text	Assignment from student activity book	Notes
7.1	Geometric transformations.	Assign 40 – 44, 48, 53, 56, 59, and 60 – 64 if you ask your students to keep a journal.	Exploration 1, 2, and/or 3, and/or Investigation. In **preparation** for the next section, consider assigning any or all of the following *e*-lessons, "LawsOfExponents," "LawsOfExponentsI," "LawsOfExponentsII," "LawsOfExponentsIII."	This is the first of several discussions on geometric transformations. Relax the rigor here. Be more rigorous in later chapters. Please note that some students will think this idea is the same as the parameter-behavior connection emphasized so far. However, in this case, we are making the connection between an operation on a function and the resulting function behavior change. Because the parameter-behavior connection has been emphasized, understanding transformations is easier.
7.2	Laws of exponents and simplification.	Assign 1 – 28, 39 – 45, 51 – 55, and 46 – 50 if you ask your students to keep a journal.	Assign Explorations **before** taught in class; Concept Quizzes 1, and/or 2, and Investigation.	With caution, use the numeric representation of the problem and solution to check the pencil and paper work.
7.3	Solving equations and inequalities containing the exponential function.	Assign 1 – 32, 38 – 40, and 33 – 37 if you ask your students to keep a journal.	Investigation **before** taught in class. Assign Exploration and/or Concept Quiz (each has a different objective). Consider assigning the *e*-lesson "SolveExponentialEq."	Since the technology-based methods don't change when the function changes, there is nothing new to solving equations and inequalities containing the exponential function. The algebraic method does solve some simple equations. The idea behind the algebraic method may be more important – see Investigation 7.3.
7.4	Exponential function as a model (applications of the exponential function).	Assign 1 – 34 and 35 – 39 if you ask your students to keep a journal.	Exploration 1 and/or 2, Investigation, and/or Concept Quiz. Consider assigning the *e*-lesson "Create Exponential."	Official applications of the exponential function. Note similarities and differences.
	Explorations, Concept Quizzes, etc. group work.		Consider using the suggested *e*-lessons (TI-StudyCard lessons)	Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Explorations, Concept Quizzes, etc. group work.		Consider using the suggested *e*-lessons (TI-StudyCard lessons)	Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.

Section	Topic	Assignment from text	Assignment from student activity book	Notes
	Chapter Seven review.			
	Chapter Seven test.			
	Start a modeling project.		Assign Modeling Project 1, 2, 3, 4, or 5.	Like always, assign one to all students or let students choose. By now, they should be getting faster at finishing them. The modeling projects are applications of mathematics taught. Further, they teach problem solving and use the scientific method as the tool for solving the problems. Since the modeling projects can take from 2 to 10 hours (depending on student ability), if students start them in class, they will need to finish them outside of class.

Chapter Eight (13 traditional class periods)

Section	Topic	Assignment from text	Assignment from student activity book	Notes
8.0, 8.1	Introduction and the rational function.	Assign 1 – 18 and 26 – 34.	Consider assigning the *e*-lesson "Behaviors-Rational."	Develop the existence and need for the rational function. Use the contextual material in 8.0 and 8.1 to help. Add your own data from using the CBL2 and pressure sensor to collect data on a volume pressure relationship in the 20-cc syringe. Include rate of change and increasing and decreasing. Discuss these behaviors in the context of the volume-pressure relationship. Finish the study of the rational function's behaviors, and promote the need for traditional symbol manipulations related to the function.
8.1	Finish the rational function and geometric transformations of the rational function.	Assign 19 – 25, 35 – 43, 52 – 68, and 69 – 73 if you ask your students to keep a journal.	Exploration 1 and/or 2, and/or Concept Quizzes 1, 2, and/or 3, and/or Investigation.	The data and situation above gives you a wonderful opportunity to discuss the physical meaning of an asymptote. There are several good ancillaries. Use as many as you can as teaching/learning tools.
8.2	Fundamental Property of rational functions.	Assign 1 – 17, 23 – 31, and 32 – 36 if you ask your students to keep a journal.	Consider assigning the *e*-lesson "RationalReduce." Consider assigning the Investigation **before** you teach 8.2 formally. Assign the Exploration and/or Concept Quiz.	The text uses the calculator as an authority "figure" to confirm properties related to the rational function. Consider using it similarly; perhaps as "what if" and then confirm with the calculator.

Section	Topic	Assignment from text	Assignment from student activity book	Notes
8.3	Multiplication and division of rational functions.	Assign 1 – 26 and 27 – 31 if you ask your students to keep a journal.	Concept Quiz and/or Investigation. Consider assigning the *e*-lesson "RationalMultiply."	The text uses the calculator as an authority "figure" to confirm products and quotients of rational functions. Consider using it similarly; perhaps as "what if" and then confirm with the calculator.
8.4	Addition and subtraction of rational functions.	Assign 1 – 14, 19 – 26, and 29 – 32.	Consider assigning the *e*-lesson "RationalAddSubt." Consider assigning the Exploration **before** you teach addition of functions.	Note the graduated series of examples of addition of rational functions in the text. Students can usually follow this progression because it builds on what they know. Try something similar and use the calculator to check the answers.
8.4	Simplification of complex rational functions.	Assign 15 – 18, and 33 – 37 if you ask your students to keep a journal.	Assign the Concept Quizzes and Investigation as needed.	Like above, start with arithmetic examples and move to the algebraic. Note the over-all level of difficulty is low.
8.5	Solving equations and inequalities containing rational functions using technology-based methods.	Assign 1 – 18.	Exploration 2, Concept Quiz and Investigation are similar. Assign one.	By using technology-based methods, there is nothing new to learn. The erroneous lines the calculator draws when in connected mode may cause problems for students. Concentrate on the extensions of the contextual situations developed at the beginning of the section.
8.5	Solving equations and inequalities containing rational functions using technology-based methods.	Assign 19 – 31.	Exploration 8.5 number 1 will provide some interesting challenges to students.	Work on the more traditional exercises, but allow for a variety of methods for solving them. Include the pencil and paper method.
8.5	Inverse variation.	Assign 32 – 43 and 44 – 48 if you ask your students to keep a journal.	Consider assigning the *e*-lesson "SolveRationalEqn," and/or "Variation-Inverse," and/or "Create Rational."	Use the calculator-based methods as well as algebraic methods for solving the equations. Consider re-using the volume pressure relationship with the CBL2 and pressure sensor.
	Explorations, Concept Quizzes, etc. group work.		Consider using the suggested *e*-lessons (TI-StudyCard lessons)	Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.

Section	Topic	Assignment from text	Assignment from student activity book	Notes
	Explorations, Concept Quizzes, etc. group work.		Consider using the suggested *e*-lessons (TI-StudyCard lessons)	Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Chapter Eight review.			
	Chapter Eight test.			
	Modeling project.		Assign either of the Modeling Projects.	Select one of the two projects. The rumor model might be a little more fun. The modeling projects are applications of mathematics taught. Further, they teach problem solving and use the scientific method as the tool for solving the problems. Since the modeling projects can take from 2 to 10 hours (depending on student ability), if students start them in class, they will need to finish them outside of class.

Chapter Nine (12 traditional class periods)

Section	Topic	Assignment from text	Assignment from student activity book	Notes
9.0, 9.1	The square root function – developing the existence and need by looking at it contextually.	Assign 1 – 13.	Consider assigning the *e*-lesson "Behaviors-SquareRt." Investigation can be assigned **before** this topic is presented.	Just like the first sections in the chapters on the linear, exponential, rational, and now the square root functions, the intent is to show the existence and need for a new function, finish the study it's behaviors, and lead into the need for traditional symbol manipulations related to the function. Using the CBL2 and the photogate sensor from Vernier, develop the relationship between the period and arm length of a pendulum. A stopwatch and meter stick will also work. This is just one more example of the "need" for a square root function.
9.1	Changing the domain of a function and geometric transformations.	Assign 39 – 47.	Concept Quiz 1	Both of these topics are repeated from other places. They may be more difficult here. Transformations are difficult and need the repetition. Changing the domain is basic to the modeling projects.

Section	Topic	Assignment from text	Assignment from student activity book	Notes
9.1	Behaviors of the square root function.	Assign 14 – 38, 54 – 64, and 65 – 68 if you ask your students to keep a journal.	Concept Quiz 2, 3, and/or 4.	This is the final opportunity for students to understand the behaviors of the square root function.
9.2	Simplification of square root expressions.	Assign 1 – 46 and 47 – 51 if you ask your students to keep a journal.	Concept Quiz 2 should be assigned **before** this section is formally taught. Concept Quiz 1 can be challenging. Consider assigning the *e*-lesson "SqrRootSimplifying."	Expand on the use of the calculator as an "authority figure" as needed. Notice that the simplifications are relatively simple. This is not a high demand topic.
9.3	Operations with irrational numbers and square root functions.	Assign 1 – 47.	Exploration 1 and 2, Concept Quiz and Investigation are strongly recommended. Consider assigning the *e*-lesson "SqrMultiplication" and "SqrRootAddSubtract.	The topic is very basic. The exercises reflect the *Standards* suggestion of decreasing attention paid to simplification of rational expressions. The ancillary materials can teach students some of the basic skills and concepts.
9.4	Fractional exponents.	Assign 1 – 42.	Investigation should be assigned **before** Section 9.4 is taught formally, as should be Concept Quiz.	Be sure students can find any root with the calculator.
9.5	Equations containing the square root function.	Assign 1 – 39.	Exploration can be challenging, and may also promote a good class discussion. Concept Quiz is very good and is challenging. These should be assigned, as should be Investigation. Consider assigning the *e*-lesson "SolveSqrRootEqn"	Use all methods for solving the equations. Since there are no new calculator-based methods, solve with the algebraic method and check with the technology methods. However by now, students will prefer the zeros or intersection methods. Don't force students to use just one method.

Section	Topic	Assignment from text	Assignment from student activity book	Notes
9.6	The square root function as a mathematical model.	Assign 1 – 42.	Exploration 9.6.	Consider using the CBR2 to reproduce the velocity data, and the CBL2 and Vernier photogate sensor to show the relationship between a pendulum are length and the period (or with a stopwatch and meter stick).
	Explorations, Concept Quizzes, etc. group work.		Consider assigning the *e*-lesson "CreateSquareRoot."	Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Explorations, Concept Quizzes, etc. group work.		Consider using the suggested *e*-lessons. (TI-StudyCard lessons)	Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Chapter Nine review.			Keep the symbol manipulation at a low level and emphasize the function aspects of the square root function.
	Chapter Nine test.			
	Modeling project.		Assign one of the three projects.	Any of the modeling projects will work. Freeway entrance may be the most interesting to students. The modeling projects are applications of mathematics taught. Further, they teach problem solving and use the scientific method as the tool for solving the problems. Since the modeling projects can take from 2 to 10 hours (depending on student ability), if students start them in class, they will need to finish them outside of class.

Chapter Ten (12 traditional class periods)

Section	Topic	Assignment from text	Assignment from student activity book	Notes
10.0, 10.1	Existence of the quadratic function in the real world and transformations of the quadratic function.	Assign 1 – 14.	Consider assigning the *e*-lesson "Behaviors-Quadrati." Exploration 2, and Concept Quiz 1 and 4.	The intent of this section is to show the existence and need for the quadratic function through contextual situations. Please consider using the CBR2 to measure the time-distance relationship of tossing a ball straight up over the CBR2. Work with transformations should be short due to previous coverage. Some students will still need the time.

Section	Topic	Assignment from text	Assignment from student activity book	Notes
10.1	Behaviors of the quadratic function.	Assign 15 – 37, and 52 – 60.	Concept Quizzes 2 and 3, Investigation.	Finish the study of function behaviors. Make a direct connection between real world situations and function behaviors. Develop the need for traditional symbol manipulations related to the function by connecting the ball toss maximum point to the standard form of the quadratic.
10.2	Solving quadratic equations in factored form.	Assign 1 – 30, and 33 – 41 if you ask your students to keep a journal.	Consider assigning the *e*-lesson "SolveQuadraticEqn." Concept Quiz and/or Investigation should be assigned **before** this section is taught in class. Consider the Exploration.	Use the graphing calculator to develop the concept of solving the equations. To test student understanding, be sure to assign ancillary work. Emphasize the real world connections between solutions to the equation and the ball toss. This topic should be really easy because of the zero-factor connection made in Chapter Three.
10.3	Solving the quadratic equation by the square root property.	Assign 1 – 9.	Explorations 1 and 2, and/or Concept Quiz.	Solving by the square root property may not be too important, but is one of those procedures that can be useful in other mathematics courses.
10.3	Solving the quadratic equation by completing the square method.	Assign 10 – 32.	Investigation is a good extension of the topic.	Solving by the completing-the-square method may not be important, but it does relate back to putting the quadratic function in standard form – something that is relatively important.
10.4	Operations with complex numbers.	Assign 1 – 17.	Assign ancillary work as appropriate.	Use the calculator to explore what happens when you perform an arithmetic operation on this "new" kind of numbers. Students should know what a complex number is and should be able to do arithmetic operations on complex numbers. Consider allowing students to use the calculator to do the operations.
10.4	Solving equations with the quadratic formula.	Assign 18 – 25 and 32 – 42.	Exploration 1 is an interesting extension.	When doing the calculation of the quadratic formula, use the graphing calculator to minimize the computational errors.
10.5	Using the quadratic function as a model.	Assign 1 – 32.	Use the Vernier photogate in Exploration 10.5. Assign other ancillary materials as needed.	Since students have used applications of the quadratic before, this section shouldn't be too demanding.

Section	Topic	Assignment from text	Assignment from student activity book	Notes
	Explorations, Concept Quizzes, etc. group work.		Consider using the suggested *e*-lessons (TI-StudyCard lessons)	Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Explorations, Concept Quizzes, etc. group work.		Consider using the suggested *e*-lessons (TI-StudyCard lessons)	Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Chapter Ten review.			
	Chapter Ten test.			Allow full use of the calculator.
	Modeling project.		Assign one of the three projects.	Project 1 may be the best one. The modeling projects are applications of mathematics taught. Further, they teach problem solving and use the scientific method as the tool for solving the problems. Since the modeling projects can take from 2 to 10 hours (depending on student ability), if students start them in class, they will need to finish them outside of class.

Chapter Eleven (9 traditional class periods)

Section	Topic	Assignment from text	Assignment from student activity book	Notes
11.0, 11.1	The distance formula.	Assign 1 – 18, 20, and 22.	Concept Quiz and Investigation	If it is sunny out, try the measurement of an unknown height with that of known height as shown in 10.0. Note the development of the distance formula from one dimension to two dimensions.
11.1	The midpoint formula.	Assign 19, 21, and 23 – 28.	Exploration	Consider using a contextual situation to engage the students in the midpoint formula, like finding the midpoint between walls of the classroom.
11.2	Triangle properties.	Assign 1 – 31.	Assign ancillary materials as needed or desired.	If this material is new to students, you may want to use two days on this section.
11.3	Properties of parallelograms.	Assign 1 – 27.	Exploration	Find parallelograms in your classroom and discuss some of their properties.
11.4	Equations and properties of circles.	Assign 1 – 35.	Explorations 1 and/or 2, Investigation	Much of section 11.4 is based on the analytical geometry of circles.

Section	Topic	Assignment from text	Assignment from student activity book	Notes
	Explorations, Concept Quizzes, etc. group work.			Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Explorations, Concept Quizzes, etc. group work.			Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Chapter Eleven review.			
	Chapter Eleven test.			

Chapter Twelve (11 traditional class periods)

Section	Topic	Assignment from text	Assignment from student activity book	Notes
12.0, 12.1	Conversions between degrees and radians.	Assign 1 – 8.	Exploration 1 sets the stage for the trigonometric definitions	This topic is very useful in trigonometry and in basic physics.
12.1	Coterminal angles.	Assign 9 – 22.	Assign other ancillaries as appropriate	The idea of angles bigger than 360° may be new to your students. Try to explain in the context of a real world situation.
12.2	Definition of the sine function in the context of real-world data.	Assign 1 – 6 and 9 – 17.	Concept Quiz	Please use the contextual data to develop the idea of a sine function, show its existence, and the need for such a function. Bring in other data that is sinusoidal. Or use the CBR2 and a pendulum and collect time-distance data as the pendulum swings. If you have a CBL2, hold the light sensor close to an incandescent light source for 0.003 seconds and collect 30 – 40 samples.
12.2	Simple transformations of the sine curve and using the calculator to find trig values.	Assign 8.	Investigation	Teach calculator usage.
12.2	Special angles.	Assign 7, and 18 – 33.	Exploration 1 and/or 2	Many people still want students to memorize these.

Section	Topic	Assignment from text	Assignment from student activity book	Notes
12.3	Solving right triangles.	Assign 1 – 25.	Assign ancillaries as appropriate.	You may want to start with the problem in 12.0. Note that we started with the general case in 12.1 and now move to the specialized cases involving right triangles. This is in keeping with the concept of a function approach.
12.4	Trig functions as mathematical models.	Assign 1 – 27.	All of the explorations are interesting for different reasons. Assign at least one of them.	This is a fairly traditional section. It may be different in that all exercises are contextual. Use the calculator throughout.
	Explorations, Concept Quizzes, etc. group work.			Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Explorations, Concept Quizzes, etc. group work.			Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Chapter Twelve review.			
	Chapter Twelve test.			All chapter tests are designed to be taken with a graphing calculator. Don't forget that there is an extra chapter test in the teacher ancillary package.
	Modeling project.		Both Modeling Projects are interesting. Assign one of them.	The modeling projects are applications of mathematics taught. Further, they teach problem solving and use the scientific method as the tool for solving the problems. Since the modeling projects can take from 2 to 10 hours (depending on student ability), if students start them in class, they will need to finish them outside of class. Assign one project to all, or let students decide which to do. Both are challenging.

Chapter Thirteen (12 traditional class periods)

Section	Topic	Assignment from text	Assignment from student activity book	Notes
13.0, 13.1	Systems of equations and inequalities.	Assign 1 – 41.	Investigation should be assigned **before** the topic is taught in class. Assign the other ancillaries as desired. If you have the class time, consider assigning them all.	Students have been using graphs for long enough that the graphical method is obvious. They have used it when solving equations by the intersection method. This is the reason for the first example – to make the connection. The power of the graphing calculator is used to develop a method for solving a system of inequalities. The Inequality Grapher app from Texas Instruments will do a better visualization on the systems of inequalities than what is shown in the textbook.
13.2	Solving systems by the addition method.	Assign 1 – 16 and 23 – 35.	Investigation should be assigned **before** 13.2 is taught formally in class. All of the ancillaries have teaching features. Assign as appropriate.	Please note the development of the addition property by using visualizations of what happens when two equations are added. The approach looks at mathematics as an experimental science, and confirmation of a conjecture is immediate upon using the calculator.
13.3	Solving systems by the Cramer's Rule.	Assign 1 – 11, 17 – 19, and 33 – 34.	Exploration 2 and Concept Quiz 1	This method may be omitted if desired
13.3	Introduction to matrices.	Assign 12 – 16, 35, 36.	Concept Quiz 2	Keep the operations simple and encourage explorations using the calculator.
13.3	Solving systems of equations using matrices.	Assign 20 – 29, 37, and 38 – 42 if you ask your students to keep a journal.	Exploration 1 and/or Investigation	The matrix method is the most important part of this section. Use the calculator for all matrix calculations – once you are convinced that students understand how to do them.
13.4	Systems of equations as mathematical models – the traditional exercises.	Assign 1 – 18.	Assign ancillary exercises as desired.	Please allow students to use any method of their choice for solving the systems of equations. Use 2 or 3 methods for each problem when you work exercises on the board.
13.4	Multi-constant rates of change problems.	No assignment.		This topic was started in Chapter Four. Just have your students graph sums and differences of absolute value functions. Analyze their behaviors.

Section	Topic	Assignment from text	Assignment from student activity book	Notes
13.4	Multi-constant rates of change problems.	Assign 19 – 34.		The computer algebra system is used to help develop a pattern. Once the pattern is recognized, a graphing calculator can be used. This is a good opportunity to talk about algorithms. Maybe a student can find another algorithm for solving the problems. This material is not in any other text. It is a good example of needing various mathematical tools to solve the problems.
	Explorations, Concept Quizzes, etc. group work.			Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Explorations, Concept Quizzes, etc. group work.			Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Chapter Thirteen review.			
	Chapter Thirteen test.			

Chapter Fourteen (11 traditional class periods)

Section	Topic	Assignment from text	Assignment from student activity book	Notes
14.0, 14.1	The log function in the context of the Richter Scale.	Assign 1 – 10.		Develop the need and existence for the logarithmic function by using the CBL2 and the pH probe with distilled water and lemon juice.
14.1	Making the conversion/connection from the exponential to logarithmic function.	Assign 11 – 26.	Exploration 1 and 2	Make the transition from the exponential form to the logarithmic form slowly. Use an approach similar to what is in the textbook.
14.1	Behaviors of the logarithmic function.	Assign 27 – 45 and 52 – 64.	Concept Quiz and Investigation	Discover all of the behaviors of the log functions – see ancillaries. You may want to ask the conceptual-based questions in class

Section	Topic	Assignment from text	Assignment from student activity book	Notes
14.2	Introduction to properties of logarithms.		Assign Exploration 1 and Investigation **in class**.	The exploration and investigation will lead students to discover the logarithmic properties.
14.2	Properties of the logarithms from a function perspective.	Assign 1 – 49.	Concept Quiz	Build on the student's experience from doing the ancillaries above.
14.3	Solving exponential equations with properties of logarithms.	Assign 1 – 27 and 32 – 41.	Investigation should be assigned **before** the material is formally taught. Exploration 1 can be challenging and fun. Assign Number 2. Consider assigning the *e*-lesson "SolveLogEquations."	Like other equations, the technology-based methods are not new. So spend most time on the algebraic method, but still use technology methods when doing samples.
14.4	The logarithmic function as a mathematical model.	Assign 1 – 33.	Concept Quiz should have interesting student results.	Emphasize similarities in the relationships. Use technology as much as possible. If possible, discuss other applications of the log function. Do your students know any?
	Explorations, Concept Quizzes, etc. group work.		Consider using the suggested e-lesson (TI-StudyCard lessons)	Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Explorations, Concept Quizzes, etc. group work.		Consider using the suggested e-lesson (TI-StudyCard lessons)	Use this day to do **in-class** group work on Explorations, Concept Quizzes, etc. that you did not assign earlier in the chapter.
	Chapter Fourteen review.			
	Chapter Fourteen test.			
	Modeling projects.			The modeling projects are applications of mathematics taught. Further, they teach problem solving and use the scientific method as the tool for solving the problems. Since the modeling projects can take from 2 to 10 hours (depending on student ability), if students start them in class, they will need to finish them outside of class.