

| Year | Development | Grade | Overview |
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| 2008 | Focusing on Parabolas | Grades 9-12, Algebra II, Pre-Calculus | Algebra II students will develop an understanding of parabolas based on the focus–directrix definition. Students will construct parabolas, derive their equations, and solve problems by applying those equations. |
| 2008 | Homer DePot Wants to Turn Green | Grades 9-12 | This unit is designed to give students the opportunity to see various tiered curricula used in a realistic setting. |
| 2008 | Logarithms | Grades 9-12, Algebra II, College Algebra, Pre-Calculus | In this Concept Development Unit, the concept of logarithms is discussed. The relationship between exponential equations and logarithmic equations is explored. |
| 2007 | Financing Superheroes | HS Pre-Calculus | Students will look at the financial needs of Superheroes in both investments and loans to finance their crime fighting activities. |
| 2004 | Determining the Hours of Sunlight for a Day in Washington, D.C. | Grades 9-12 | Students will utilize actual data from the Naval Observatory to determine a linear regression model that can predict the number of sunlight hours in a day for Washington, D.C. |
| 2004 | Dinner at the Rabbit Café: A Predator-Prey Investigation | Grades 10-12, Algebra, Pre-Calculus | The students will investigate how populations grow with and without another predator population. |
| 2004 | Super Size It! | Grades 11-12, Algebra II and Pre-Calculus | The Geometer’s Sketchpad is a powerful tool for solving problems that calls for maximizing and minimizing a function. |
| 2000 | Stomach Turner Roller Coaster | Grades 11-12, Advanced Math, Pre-Calculus | This unit teaches students to recognize, graph, and write equations for sinusoidal curves with and without the use of technology. |
| 1997 | Can Cruddy Cool As Fast As Clean? | Grades 9-12, Pre-Calculus, Calculus | Students will investigate variations in cooling times for ordinary tap water and salt water. Data will be collected using the CBL unit and the TI-82 calculator to create and interpret data plots. |
| 1997 | Multiple Representations of Limits | Grades 11-12, Pre-Calculus | Using graphical, numerical, and algebraic approaches, Pre-Calculus students develop an intuitive understanding of the concept of the limit in preparation for a more rigorous treatment in Calculus. |
| 1997 | Music to Math: Exploring the Relationships... | College Algebra, Pre-Calculus, Advanced Algebra II | Each tone on a musical scale has a specific frequency. The frequencies of the twelve tones in an octave have an exponential relationship. |

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| 1995 | Using Technology to Review Parabolic Functions | Grades 10-12, Pre-Calculus | The parabola is assumed to be the path of a tossed object. In this lesson, students will review/explore the distinguishing features of the parabola by using technology to make generalizations that will reinforce what was previously learned. |