

MY FAVORITE
lesson

Richard S. Forringer

The First Day of Class

Twenty-five years ago, when my son entered middle school, I asked him how his first day went. He was disappointed. Every class was the same: The teachers talked only about their syllabi and the class rules. They distributed textbooks and reviewed the list of supplies needed for that particular class.

At that moment I decided to revise my own approach to the first day of class. I came up with a new lesson plan that would make the first day of middle school algebra a different experience for students. For the last twenty-five years, I have used the first class to provide my students with an opportunity to begin the process of learning algebra. I have given lots of thought to how to do that and have modified the lesson over the years. The result seems to have worked. Students have consistently joined in these activities with vigor and enthusiasm.

I start class with a very short introduction. I tell students that there is some important information that they need to be aware of, that I have written it all down, and that I will hand it out at the end of class. But, for this first class, we will be playing a game that has a mathematical application. This game will set the stage for the first major concept that we will study this year, although this may not be immediately evident.

The game is a word association game. I provide some ground rules and then begin the game by offering a word and asking students to respond with the first word that comes to mind. For instance, I will say, “Monkey,” and the students will call out some responses. After several more minutes of word associations, I say, “OK, for the next word I want us to do some more serious analysis

When the responses start to slow down, I ask students to guess which one response has come up more often than any other word over the years that I have played this game.

of the responses.” Then I say, “Mathematics.” The students respond with a variety of associations, but some typical replies include “easy,” “hard,” “addition,” “Mr. McGivney” (or the name of one of the other mathematics teachers at our school), “numbers,” “science,” “percent”—the list goes on.

When the responses start to slow down, I ask students to guess which one response has come up more often than any other word over the years that I have played this game. In fact, this word has been mentioned every year as a response to the cue “mathematics.” Once students reflect for a moment or two, they easily guess that the word is “numbers.” When they do, I ask, “What

part of speech is the word ‘number?’” They respond that it is a noun, and I then ask them to consider a list of adjectives to describe the noun “number.” We brainstorm, and I write their responses on the board. Again, students’ responses vary greatly from year to year, but the most typical adjectives include “big,” “small,” “phone,” “even,” “odd,” “whole,” “prime,” “natural,” “rational,” “irrational,” “composite,” “positive,” “negative,” “real,” and many more.

My point is that the word “number” generates many connections. In my experience, middle school students are not alert to thinking about all the different kinds of numbers. They realize now, perhaps for the first time, that the notion of number theory is fundamental to the study of mathematics.

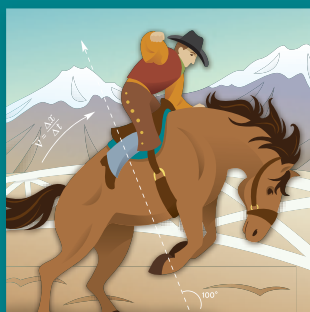
This lesson is full of activity. Students typically leave the room energized and with a sense that, on the first day of middle school algebra, they had the opportunity to think seriously and engage with an important algebraic concept.

“The Back Page” provides a forum for readers to share a favorite lesson. Lessons to be considered for publication should be submitted to mt.msubmit.net. Lessons should not exceed 600 words and are subject to abridgment.



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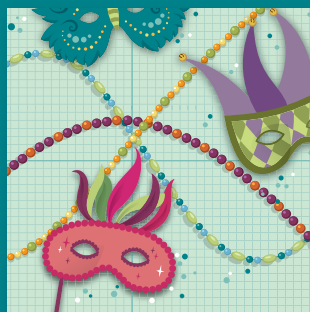
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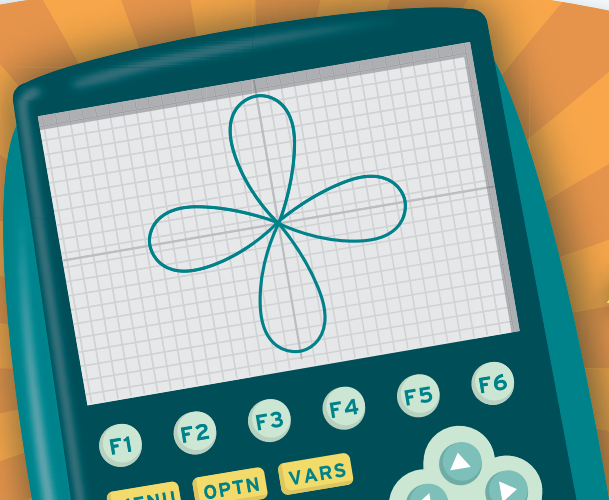
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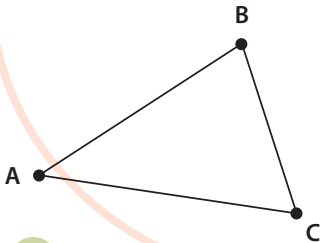
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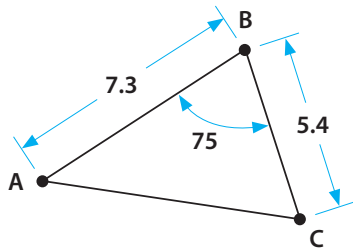
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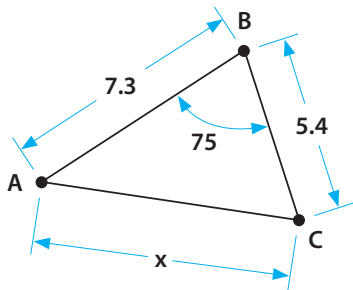
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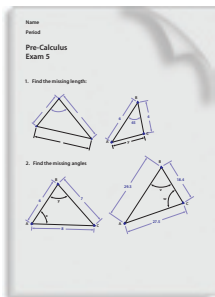
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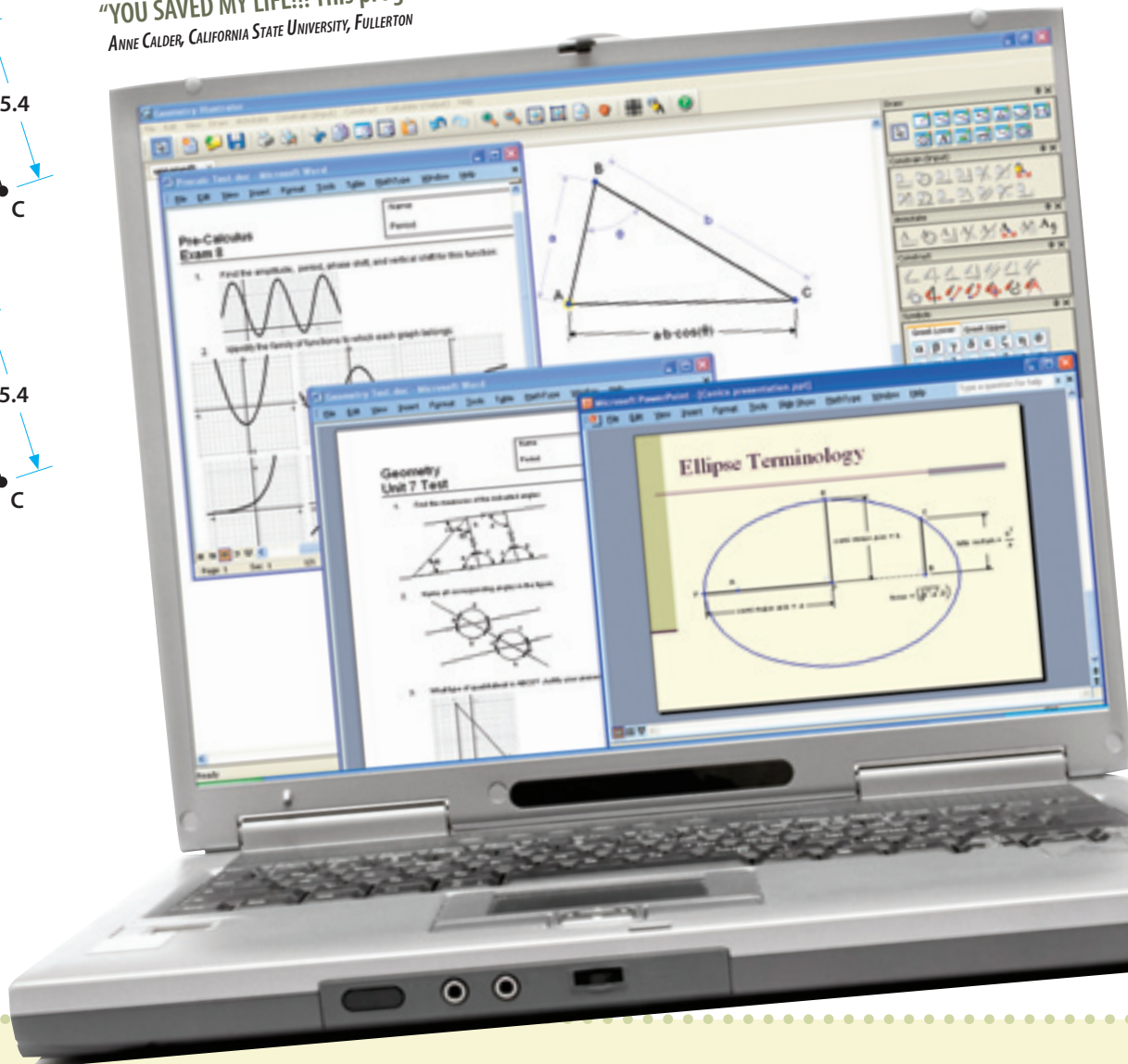
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