

## Primetime NUMB3RS

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Audience: High School

*The goal of this presentation was to make high school math teachers aware of an existing resource of math activities that is tied to a popular, current TV program, and to tell them how we have implemented these activities and programs in our classrooms. The entire goal of our presentation was to share resources, which is an important way that teachers support each other.*

The presentation began with the showing of a three-minute clip of the television show, NUMB3RS (from the episode “Janus List”), which airs on CBS. Texas Instruments, CBS, and the National Council of Teachers of Mathematics have collaborated to create the “We All Use Math Everyday” program, an online education initiative that provides teachers with lesson plans and resources that are based on the mathematics used in the television program. We developed course binders (one for Algebra I, Geometry, Algebra II, Pre-Calculus, Probability, Trigonometry, and Calculus) that make the activities accessible to the entire math department and help to keep activities from being repeated in different courses. Along with a copy of every activity for that course, each binder includes a copy of the Parental Consent Form for viewing a PG-13 TV program; a Video Scheduling Request Form; and a Table of Contents for that particular binder giving the project number, the name of the episode, the name of the project, the math topic(s) that are covered, and the corresponding textbook reference. Each project also has a Log Sheet where teachers can leave comments and answer such questions as: was it appropriate for the student level? was the project appropriate for the subject area? was one class period sufficient to complete the project? would you do this project again?

We gave each participant a folder which included the handouts needed for several lessons, which we spent time discussing. Then we showed a second clip from NUMB3RS (from the episode “Harvest”), handed out were paper circles, activity sheets, and markers, and proceeded to do the activity Waxing Elliptical. In this activity, students investigate the relationship between the foci and the shape of ellipses. As the participants worked on the activity, the presenters walked around the room and answered questions.

We then handed out the materials for and discussed a second activity, How to Get a Date, that goes with the NUMB3RS episode “Bones of Contention.” In this activity, students use graphing calculators and M&Ms to explore the relationship between exponential decay and radiocarbon dating.

Lastly, we gave the participants handouts on three more activities—Where’s Cheetah?, The Leaf Drops, and Barging In—that could be used with the NUMB3RS episode (“Finders Keepers) for that week. Participants were also given the address for the CBS website for the show (see below), and for the “We All Use Math Everyday” program, where the lesson plans and materials for each of activities in the presentation, along with many more, can be found.

Websites:

The website for the NUMB3RS television show is: [www.cbs.com/primetime/numb3rs](http://www.cbs.com/primetime/numb3rs).

The website for the “We All Use Math Everyday” program is:

[www.weallusematheveryday.com](http://www.weallusematheveryday.com)