

PreCalculus Final Project 2007: *Numb3rs, We All Use Math Every Day*

Choose a topic based on a video clip from the TV show Numb3rs. Everyone must pick a different topic and sign up. Sign up with your name, the date, the math topic, episode season and title. An episode may be used more than once for a different math topic. First one signed up wins!

All presentations will include: a short (less than 3 minutes) video clip from Numb3rs; an overview of a mathematical topic related to the video clip; and either independent research of the topic or an extension of the topic beyond the TI activity page (perhaps based on one of the Additional Resources listed on the handout.)

Potential Topics: Read through the activities on the TI site below. There are several topics for every episode of Numb3rs. Attached is a sample on calculating the day of the week. Or browse through redhawke.org site which lists all math topics on the show.

Web Sources

Texas Instrument's math site for Numb3rs, Season 1, 2, and 3 activities:

http://www.weallusematheveryday.com/tools/waumed/activities_season1.htm

Click on Season 1, 2 or 3 on the side

Official site: <http://www.cbs.com/primetime/numb3rs/>

Northeastern University math professor comments on the math in Numb3rs:

<http://www.atsweb.neu.edu/math/cp/blog/>

Math topics used in the show, listed alphabetically, links to more information, left panel lists episode with math topic: <http://www.redhawke.org/content/view/308/82/>

Video sources:

Numb3rs, Season 1 (13 episodes) and Season 2 (24 episodes): DVDs may be checked out overnight ONLY! Video clips are also available on the web (Windows Media Player format):

<http://www.numb3rs-online.net/video/>

Your task

- I. Research and prepare a written and oral presentation on your topic.
- II. At the beginning of your presentation, hand in a 1 – 2 page summary paper that includes a bibliography, including the season, episode and times of the video clip. Include a copy of the TI activity if your presentation is based on one. Your presentation/bibliography must include at least one source outside of the TI site.
- III. Give an oral presentation to the class (5 – 10 minutes.) Be sure to use the rubric as a checklist to prepare your presentation.
- IV. Include a video clip from the show. I will have a TV and DVD player so know which disc, which episode and which times to show. Clips from numb3rs-online.net can be inserted into PP.
- V. PP presentations must be on a USB key (available for checkout in the library) so you don't have to log off and on for every presentation.

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Name _____

Score _____

Topic and episode:

Comments

0	-	√-	√	√+	+
Not done	Below standard on a major point or a major mistake	Below standard on a minor point or a small mistake	Meets standard, all areas correctly performed	Above standard on a minor point or in small way	Above standard on a major point or in an impressive way
-10	-7	-4	0	+3	+5
Criteria					
Topic: based on Numb3rs, appropriate for classroom; original: everyone must choose a different topic					
Vocabulary use: correct terminology (new vocab is a plus)					
Complexity: you should demonstrate that you learned something new about mathematics (MS math is a minus, HS math is a check, something we've never done in HS is a plus)					
Mathematics Overview: you need to explain the mathematics that is involved in your topic.					
Research: topic is not based on TI activity and was independently researched OR presentation/written summary includes information beyond the TI activity					
Expertise: learn enough about your topic to answer questions from the audience (your classmates and me)					
Class Presentation: organized, clear, interesting voice and manner (do NOT read your paper)					
Sources: at least one source outside of the TI site, bibliography included in paper					
Paper: neat, clear, typed summary with details as needed, watch spelling!					
Timeliness: you will lose points if you are not prepared or absent.					
Class participation: part of your grade is learning from other presentations. You must be present EVERY DAY of class presentations. 5 points will be deducted for each absence. 10 points for a 2 hour period.					

95 is the baseline score—met the standard in each category. If you want a higher score, be prepared to impress me!