

“Where’s the Calculus?” Assessment Activity

Objective: To explore/present the calculus connections to everyday student interests or observed real-life situations through a written, visual or video format.

Points: 75 Assessment points. Will be counted in either second or third quarter depending on when project is completed.

Due: Each student will be randomly assigned one of two due dates (December 1st or February 24th). Students may ‘trade’ dates with classmates with prior teacher approval.

Audience: Introductory calculus students and adults with some exposure to calculus ideas no matter how long ago (myself as grader of course, as well as other adults such as your parents, relatives and MMSTC staff). I will give students an opportunity to share their projects on my website.

Description: What are you interested in? Soccer? Music? Video games? Rubik’s cube? Social Media? This assignment is to take a personal interest of yours and find out “Where’s the calculus?” There are four main topics of calculus: Limits, Derivatives, Indefinite Integrals and Definite Integrals with the underlying concepts of derivative being rates of change and integrals being accumulation. After your research, you will communicate your findings in one of a variety of ways: 4-6 page paper, visual presentation such as Power Point or Prezi, poster, TI Publish View Document, video or other means of communication with prior instructor approval. All projects need to include a Works Cited page in proper MLA format. In addition, you will need to turn in an 8” X 11” flyer of your project to be added to a “Where’s the Calculus?” wall in the hallway.

Grading Criteria:

- ⇒ Choose a unique interest/situation or unique aspect of such (Yes – you have to pay attention to what classmates are doing! I will post a list in the classroom that students can fill out.)
- ⇒ Present the calculus involved in that interest/situation. Content should require reflection and research on the part of the student. Research can take the form of traditional written information (print or electronic), video information, or discussions (‘interviews’) with others. A properly MLA formatted Works Cited page with 3-5 sources must be turned in.
- ⇒ Format chosen to communicate your thoughts should reflect a high school senior level quality. For example, written papers should use proper grammar and writing conventions, posters should be carefully constructed and visually appealing, PowerPoints/Prezis should be well-designed without over animation/effects and proper grammar and videos should be well-planned, edited where necessary and use good language skills. Make sure that WHAT you have to say is not impeded by HOW you are saying it!
- ⇒ Project flyer is a good snapshot of your project that incorporates your chosen interest, a brief overview of the mathematical content, and is well designed for display on a wall (i.e. not too busy and not too much text!)
- ⇒ See project rubric for further details.