**Calculus 12**

**Term 1 and Term 2 Projects**

You will do one of these two projects in Term 1 of the course and the other project in term 2.

**Class Book Club**

Bad news: we are going to read a book on the history of Calculus

Good news: you only need to read one Chapter

Bad news: you need to present your chapter to the class

Good news: you will do it with a partner (unless you do the epilogue)

We will be reading *The Calculus Wars: Newton, Leibniz, and the Greatest Mathematical Clash of All Time*, by Jason Socrates Bardi.

There are 12 chapters (and a short epilogue). You will be expected to summarize your chapter in the following way:

* relate chapter to previous chapters / information (unless you are doing chapter 1!)
* give general summary of information in your chapter
* provide visual prompts (Powerpoint, poster, video, timeline, etc)
* keep presentation brief (3 – 6 minutes approximately)
* give sense of what next chapter will entail (unless you are doing the Epilogue)

You might want to take a few notes because there will be a short, easy, open-book test after we finish the book. You can do the test with your partner if you want.

Approximate timeline:

**Term 1**

Chapter 1 Wednesday, September 20

Chapter 2 Wednesday, October 4

Chapter 3 Thursday, October 19

Chapter 4 Wednesday, November 1

Chapter 5 Wednesday, November 15 \*\*\* Biography Project due \*\*\*

Chapter 6 Wednesday, November 29

**Term 2**

Chapter 7 Tuesday, December 12

Chapter 8 Thursday, January 11

Chapter 9 Thursday, January 25

Chapter 10 Wednesday, February 7

Chapter 11 Wednesday, February 21 \*\*\* Biography Project Due \*\*\*

Chapter 12 Thursday, March 1

Epilogue & Test Friday, March 9

**Biography of Mathematicians Important to Calculus**

Your task is to prepare a short biography of one of the following mathematicians.

Johannes Kepler René Descartes

Bonaventura Cavaleri Pierre de Fermat

Evangilista Torricelli John Wallis

Blaise Pascal Michel Rolle

James Bernoulli Guillaume de l’Hôpital

John Bernoulli Brook Taylor

Colin MacLaurin Leonhard Euler

Thomas Simpson Joseph Louis Lagrange

Pierre Simon Laplace Jean Baptiste Joseph Fourier

Carl Fredrich Gauss Augustin-Louis Cauchy

August Ferdinand Mobius George Green

Carl Gustav Jacobi Pierre Verhulst

William Rowan Hamilton Karl Weierstrass

George Gabriel Stokes Bernhard Riemann

Josiah Willard Gibbs Guido Fubini

You will be expected to include the following information:

* Time and place of birth
* Interesting details of life (family, work, death, etc)
* Education details
* Important contributions to math
* Specific contributions to Calculus
* List of sources (books, websites, etc)

You must present the information in a creative way. Consider including / using a:

* Drawing / painting
* Poem / rap / song
* Talk show interview
* Skit / Puppet show
* Comic strip
* Board game
* TV or radio commercial
* Collage
* Mobile
* Crossword puzzle
* Journal / diary entries
* Postcard or letter exchange
* Newspaper article