HOMEWORK: MATH 162

HW 0 (*Due* Monday, January 25):

(1) Briefly relate (in one or two paragraphs) information about yourself that will help me get to know you. If you wish, you may let the following questions serve as a guide: When did you take Math 161 (or its equivalent)?; why are you taking Math 162 now? (for example: *"major requirement", "just for fun because I love mathematics", "nothing else fits my schedule", "my parents forced me to take this course", "I am looking for an easy A to raise my gpa"*); what is your major?; what is your career goal?; what has been the nature of your previous experience with math either in high school or in college (that is, have you enjoyed math in the past? Do you like to see applications more than theory, or do you prefer theory?). (*Please eMail your response to me no later than Friday.* For "Subject" be certain to write "**Math 162 HW 0**")

(2) Obtain an account in MyMathLab.

(3) Register for Piazza.

(4) Review chapters 2 – 5 of Thomas as needed.

HW I Read sections 6.1 and 6.2 of Thomas. MML 1 covers solids of revolution using washers, disk. Also non-symmetric solids with known cross-sections. Watch the MIT lecture on solids: http://ocw.mit.edu/courses/mathematics/18-01-single-variable-calculus-fall-2006/video-lectures/lecture-22-volumes/

Australia Day, Jan 26, 2016

HW II Read sections 11.1, 11.2, 6.3, 6.4 and 6.5 (only the concept of work). MML 2 covers parametric equations, arc length, surface area and work.

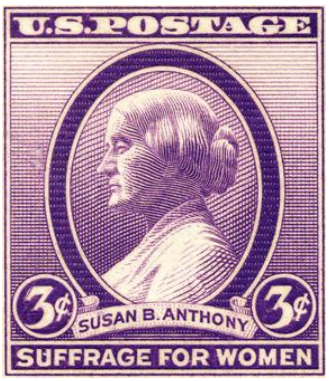
Mozart's birthday: January 27th

February 2nd

HW III Read sections 7.3, 7.4, and 8.2.
MML 3 covers sections 7.3, 7.4, 8.2 and 11.1, 11.2). *Prepare for TEST I on Friday covering Chapter 6 (1 – 4), Chapter 7 (7.3, 7.4), Chapter 8 (8.2) and Chapter 11 (11.1 – 11.2)* Watch MIT lecture 22 on volumes: http://ocw.mit.edu/courses/mathematics/18-01-single-variable-calculus-fall-2006/video-lectures/lecture-22-volumes/

Chinese New Year (Feb 7-13, 2016)

HW IV Read section 8.8 carefully.
MML4 covers improper integrals. Watch MIT lecture 36 on improper integrals: http://ocw.mit.edu/courses/mathematics/18-01-single-variable-calculus-fall-2006/video-lectures/lecture-36-improper-integrals/



Birthday of Susan B. Anthony

February 15, 1820

Birthday of Volta (Feb. 19, 1745)

HW V Read sections 8.9 and 10.1 carefully.
MML5 covers probability and sequences. Watch MIT lecture 23 on work and probability: http://ocw.mit.edu/courses/mathematics/18-01-single-variable-calculus-fall-2006/video-lectures/lecture-23-work/

Leap Year Day, 29th February!

HW VI Read sections 10.2 and 10.4 carefully! MML6 covers introduction to series and the comparison test. Watch MIT video lecture 37 on numerical series: *http://ocw.mit.edu/courses/mathematics/18-01-single-variable-calculus-fall-2006/video-lectures/lecture-37-infinite-series/*

World Wildlife Day, March 3rd

International Women's Day, March 8th

Islam Awareness Week - Loyola University Chicago

HW VII Read sections 10.3, 10.5 and 10.6 carefully! MML7 covers the integral test, the ratio and root test as well as absolute and conditional convergence. Review MIT video lecture 37 on numerical series: *http://ocw.mit.edu/courses/mathematics/18-01-single-variable-calculus-fall-2006/video-lectures/lecture-37-infinite-series/* **Prepare for Test II.**

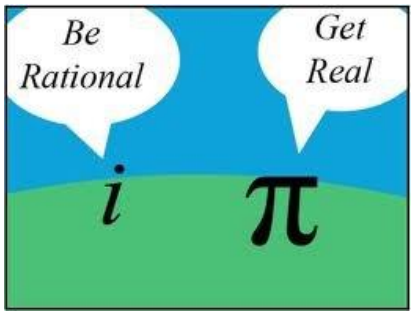
Daylight savings time begins Sunday, March 13, 2016, **2 am**

Clocks are turned **forward** 1 hour.

HW VIII Read sections 10.7 and 10.8 carefully! MML8 covers power series and Taylor polynomials. Review MIT video lecture 37 on series: *http://ocw.mit.edu/courses/mathematics/18-01-single-variable-calculus-fall-2006/video-lectures/lecture-37-infinite-series/*

Birthday of Dr. Seuss, March 2

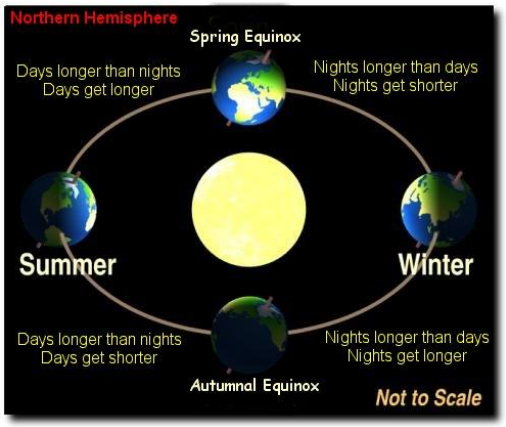
World Kidney Day, March 10, 2016



Happy Pi Day!

St. Patrick's Day, March 17th

Illinois Primary, Tuesday, March 15th



Vernal Equinox: **Sunday, March 20, 2016 at 04:30 UTC**

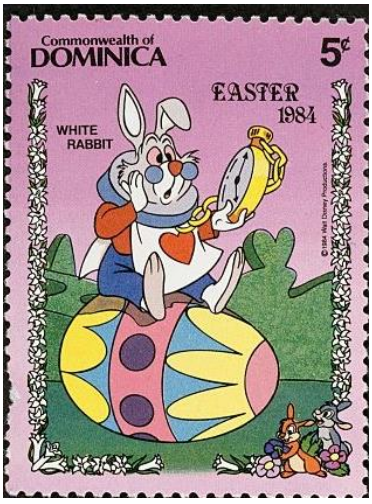
Emmy Noether (23 March 1882 - 1935)

J. S. Bach, 31 March 1685 - 1750

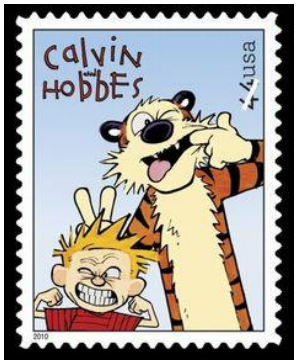
National Doctors' Day, 30 March

Cesar Chavez Day (March 31st)

Purim, March 24thh



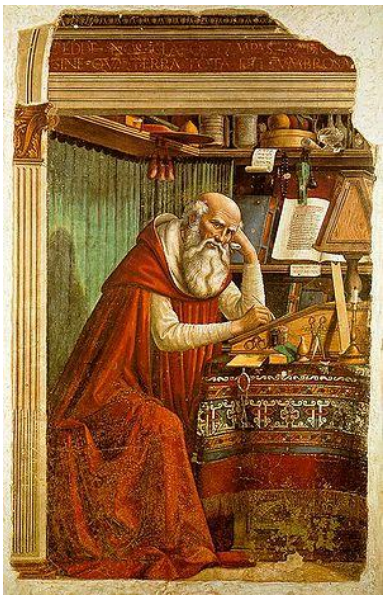
HW IX Review sections 9 and 10 of chapter 10. Study sections 11 and 12 of chapter 10. MML9 covers Taylor and binomial series. Watch MIT video lecture 38 on Taylor series: http://ocw.mit.edu/courses/mathematics/18-01-single-variable-calculus-fall-2006/video-lectures/lecture-38-taylors-series/ **Prepare for Test III.**



April Fools' Day

It's got to be the going, not the getting there that's good. – Harry Chapin, **GO GREYHOUND**

To travel hopefully is a better thing than to arrive. – Robert Louis Stevenson



St. Jerome in His Study

Domenico Ghirlandaio (1480)