**PHOMEWORK:  MATH 161**

**Homework 0** *Due:*  Tuesday, 25 August (midnight)

Briefly describe (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:  why are you taking Math 161? (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?), are you enrolled in other science or math courses this semester?, are you employed this semester? (Please eMail your response to me using as *subject:* **161 HW 0**)

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| http://www.raheresgarden.com/images/armenia1995-TsarsAbgarTrdat.jpg |
| **August 24: Feast of** [**St. Bartholomew**](https://en.wikipedia.org/wiki/Bartholomew_the_Apostle)**.**  Bartholomew and Thaddeus are considered to be  the patron saints of Armenia. They were portrayed  in a series of commemorative stamps in 1995,  celebrating the 1700th anniversary of the arrival of  Christianity in Armenia. |

**Homework 1** *Due:*  Wednesday, 2 September (midnight)

*Review* the material in Chapter 1 of Thomas, pp. 1 – 57. Also study the definitions and properties of hyperbolic functions given on pp. 439 – 440.

Solve: [MyMathLab](http://pearsonmylabandmastering.com/) Homework 1 (*Due: 11:59 pm on Wednesday*)

**Homework 2** *Due:*  Wednesday, 9 September (midnight)

Read section 2.2 of Thomas. Solve: [MyMathLab](http://pearsonmylabandmastering.com/) Homework 2 (*Due: 11:59 pm on Wednesday*)

**Homework 3** *Due:*  Wednesday, 16 September (midnight)

Read sections 2.4, 2.5 and 2.6 of Thomas. Solve: [MyMathLab](http://pearsonmylabandmastering.com/) Homework 3 (*Due: 11:59 pm on Wednesday*)



*International Day of Peace, September 21*

**Homework 4** *Due:*  Wednesday, 23 September (midnight)

Read sections 3.1, 3.2 and 3.4 of Thomas. Solve: [MyMathLab](http://pearsonmylabandmastering.com/) Homework 4 (*Due: 11:59 pm on Wednesday*)



Eid begins on Sept 23

**Homework 5** *Due:*  Tuesday, 29 September (midnight)

Review sections 3.2 and 3.4 of Thomas. Read section 3.3 Solve: [MyMathLab](http://pearsonmylabandmastering.com/) Homework 5 (*Due: 11:59 pm on Tuesday*)

*You are strongly advised to complete this assignment before Friday’s Test!*

*Recommended: Watch* [*MIT 18.01 lecture 1*](http://ocw.mit.edu/courses/mathematics/18-01-single-variable-calculus-fall-2006/video-lectures/) *(rate of change),* [*MIT 18.01 lecture*](http://ocw.mit.edu/courses/mathematics/18-01-single-variable-calculus-fall-2006/video-lectures/) *2 (limits),* [*MIT 18.01 lecture*](http://ocw.mit.edu/courses/mathematics/18-01-single-variable-calculus-fall-2006/video-lectures/) *3 (derivatives: first 20 minutes only for now)*

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| *23 September 2015, 4:21 am* | http://4.bp.blogspot.com/-nPX5UVHO48E/Tnx6MRpQrkI/AAAAAAAAAUk/KLI1O74rkSc/s320/vernal-equinox12.jpg |
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**Homework 6** *Due:*  Sunday, 11 October (midnight)

*Due:*  Sunday, 11 October (midnight)

Review sections 3.5, 3.6 and 3.7 of Thomas. Solve: [MyMathLab](http://pearsonmylabandmastering.com/) Homework 6 (*Due: 11:59 pm on Sunday*)

*Recommended: Watch* [*MIT 18.01 lecture 4*](http://ocw.mit.edu/courses/mathematics/18-01-single-variable-calculus-fall-2006/video-lectures/) *(chain rule) and* [*MIT lecture*](http://ocw.mit.edu/courses/mathematics/18-01-single-variable-calculus-fall-2006/video-lectures/) *5 (implicit differentiation, inverses)*



**Homework 7** *Due:*  Monday, 19th October (midnight)

Review sections 3.8, 3.9, 3.10, 11.1, and 11.2 of Thomas. Solve: [MyMathLab](http://pearsonmylabandmastering.com/) Homework 7 (*Due: 11:59 pm on Monday*)

*Recommended: Watch* [*MIT 18.01 lecture 6*](http://ocw.mit.edu/courses/mathematics/18-01-single-variable-calculus-fall-2006/video-lectures/) *(exponential and logs, logarithmic differentiation, hyperbolic functions)*



*Recommended: Watch* [*MIT 18.01 lecture 6*](http://ocw.mit.edu/courses/mathematics/18-01-single-variable-calculus-fall-2006/video-lectures/) *(exponential and logs, logarithmic differentiation, hyperbolic functions*



Islamic New Year, Oct 14

**Homework 8** *Due:*  Monday, 2nd November (midnight)

Read sections 4.1 and 4.6. Begin reading section 4.8 of Thomas. Solve: [MyMathLab](http://pearsonmylabandmastering.com/) Homework 8 (*Due: 11:59 pm on Monday*)

Prepare for Test II.

*Recommended: Watch* [*MIT 18.01 lecture 10*](http://ocw.mit.edu/courses/mathematics/18-01-single-variable-calculus-fall-2006/video-lectures/) *(curve sketching) and lecture 11 (max/min)*

 

**Homework 9** *Due:*  Thursday, 5th November (midnight)

Read sections 4.3 and 4.4. Review section 4.8 of Thomas.

Solve: [MyMathLab](http://pearsonmylabandmastering.com/) Homework 9 (*Due: 11:59 pm on Thursday*)

*Recommended: Watch* [*MIT 18.01 lecture 15*](http://ocw.mit.edu/courses/mathematics/18-01-single-variable-calculus-fall-2006/video-lectures/) *(anti-derivatives)*

 

**Homework 10** *Due:*  Friday, 20th November (midnight)

Read sections 4.5, 4.6, 4.7, 4.8, 5.1, 5.2, 5.3 of Thomas.

Solve: [MyMathLab](http://pearsonmylabandmastering.com/) Homework 10 (*Due: 11:59 pm on Friday*)

*Recommended: Watch* [*MIT 18.01 lecture 18*](http://ocw.mit.edu/courses/mathematics/18-01-single-variable-calculus-fall-2006/video-lectures/) *(indefinite integral)*

**Homework 11** *Due:*   Tuesday, 24 November (midnight)

Read sections 5.4, 5.5, 5.6 of Thomas.

Solve: [MyMathLab](http://pearsonmylabandmastering.com/) Homework 10 (*Due: 11:59 pm on Tuesday*)

*Recommended: Watch* [*MIT 18.01 lectures 19*](http://ocw.mit.edu/courses/mathematics/18-01-single-variable-calculus-fall-2006/video-lectures/) *and 20 (the first and second fundamental theorems).*



*It's got to be the going, not the getting there that's good.* – Harry Chapin,[**GO GREYHOUND**](http://www.harrychapin.com/music/greyhound.shtml)

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

  
[Edvard Munch](http://www.ibiblio.org/wm/paint/auth/munch/): The **Scream** (1893)

*Never work when hungry.*   
                   - Hippocrates

*Where our work is, there let our joy be.*   
                   - Tertullian

*Let us work without protest; it is the only way to make life endurable.*   
                   - Voltaire

*Work!  God will it.  That, it seems to me, is clear.*   
                    - Flaubert

[Course Home Page](http://www.math.luc.edu/~ajs/courses/161fall2015/index.pdf)          [Department Home Page](http://www.math.luc.edu/)        [Loyola Home Page](http://www.luc.edu/)