

Math 1210 Homework

Date	Probable Lecture Topic	Assignments Due
Jan 7	2.1	
Jan 8	2.2	
Jan 9	2.3	
Jan 10	2.3	Hw 1, Hw 2 Due at the end of class (no late homework accepted)
Jan 11	Help Session (optional)	
Jan 14	2.4	Hw 3, Hw 4 Due by 4:30 pm
Jan 15	2.5	
Jan 16	2.6	
Jan 17	3.1	Hw 5, Hw 6 Due at the end of class
Jan 18	Help Session (optional)	
Jan 21	Martin Luther King Jr. Holiday	

About the homework:

Please be neat! Clearly indicate your final answer. It really helps the grader out. Don't use pink or red pen to do your homework.

Show your work. It's possible to get a problem wrong because you didn't show work, especially on problems that require several steps. It's also possible to get a problem wrong because you did the work incorrectly. On very simple problems you don't need to show work.

Do as much as you can without a calculator unless otherwise indicated, as you will not be able to use one on the exams.

Staple assignments separately. For example, keep Hw 1 and Hw 2 separate.

You are encouraged to form study groups with your classmates. However, problems must be written up in your own words (not your classmate's, tutor's, or back-of-the book's words). Duplicate homeworks are not acceptable and will result in 0 credit for all parties.

For homeworks Hw 1 through 4, points will not be taken off for not showing enough work (unless you simply wrote the answer from the back of the book) or for forgetting to label. However, points will be taken off beginning the second week.

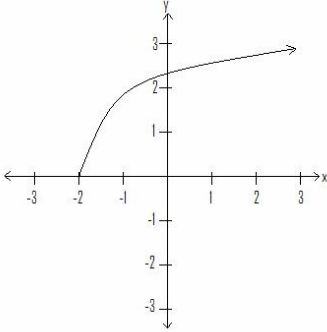
You may turn the assignments in at class or at my office (120 Sc). Please slide them under my office door if I'm not available.

Resources for Help:

- The Student Success Center <http://www.suu.edu/ss/success/> in the Sharwan Smith Center has free tutoring <http://www.suu.edu/ss/success/tutoring.html>.
- My office hours are Monday and Thursday, 10-12, 4-4:30 in SC 120. Other times by appointment.
- I encourage you to form study groups with your classmates. However, the problems must be written up in your own words. Duplicate homeworks are not acceptable and will result in 0 credit for all parties.
- Friday help sessions with the TA are primarily question/answer sessions.
- The textbook explanations can be helpful.

Hw 1:

- A. Figure out how to switch between radian and degree mode on your calculator. Put a check to show you did this.
- B. Evaluate the following using your calculator:
- $\sin(50^\circ)$
 - $\tan(2.3\pi)$ (2.3π is in radians)
- C. Give the domain of the function below.



- D. In your own words, describe what a limit basically is.
- E. How is $\lim_{x \rightarrow a} f(x) = L$ read?
- F. What is a one-sided limit?
- G. True or False? $\lim_{x \rightarrow -1} f(x)$ is the same as $\lim_{x \rightarrow 1^-} f(x)$.

Exercises pg 110-113: 1, for #1 also find $\lim_{x \rightarrow 2} F(x)$, 2, 4, 7, 10, 15b, 16b, 21, 23ab, 24

H. True or False? It is possible for $f(a)$ to be undefined and for $\lim_{x \rightarrow a} f(x)$ to exist anyway.

I. Find the following.

a. $\lim_{x \rightarrow 0^-} \frac{1}{x}$

b. $\lim_{x \rightarrow 0^+} \frac{1}{x}$

c. $\lim_{x \rightarrow 0} \frac{1}{x}$

J. Give the domain of $f(x) = \sin \frac{1}{x}$. Also find $\lim_{x \rightarrow 0} \sin \frac{1}{x}$. Try to reason it out before using a graphing calculator.