

SCHEDULE

October-26-13 9:09 PM

Topics Journal & Assign are based on this	HW Handouts , instead of textbook optional unless highlighted in which case choose some questions at your own discretion. However, do not just do easy ones and not just one question per topic, I suggest do at least 2 pages of written practice per night/topic	To Read What is AP Calculus? http://mrsk.ca/AP/KorpiWhatIsCalculus.pdf	Lesson Videos + Practice Questions with Full Solutions	Summaries + Problems with Video Solutions	TI - 89 Calculator Activities	Applets Interactive Tutorials + Quizzes + Videos of tutorials + Graphers available at http://www.zweigmedia.com/tcpage.html#ed6#en#calc Visual Calculus Tutorials http://archives.math.utk.edu/visualcalculus/index.html
Rates of Change (MHF)	http://mrsk.ca/AP/PRACTICEroc.pdf http://mrsk.ca/AP/EstimateIROCfromText.pdf http://mrsk.ca/AP/F1.1rocTangents.pdf					http://webspaceship.edu/mrsrenault/GeoGebra/Calculus/derivative_avg_ROC.html http://www.sfu.ca/~tmulhol/calculus/applets/GeoGebra-Worksheets/Tangent-Parabola-construction.html
Intro to Limits (MCV)	http://mrsk.ca/AP/d1.1IntroLimits.pdf http://mrsk.ca/AP/ACv1.1limits.pdf http://mrsk.ca/AP/CALClimitsIntroOnly.pdf	http://mrsk.ca/AP/LESSONIntroToLimits.pdf	http://online.math.uh.edu/MATH1431/C1/51/index.html	http://17calculus.com/calc/02-1limits.php	http://education.ti.com/html/13_free_courses/calculus89_online/mod04/mod04_1.html	Area of circle http://www.personal.psu.edu/dp14/java/calculus/circlearea.html Circumference of circle http://www.personal.psu.edu/dp14/java/calculus/circlecircumference.html Limit of sequence http://www.personal.psu.edu/dp14/java/calculus/limitsequence.html http://webspaceship.edu/mrsrenault/GeoGebra/Calculus/limit_laws.html
Continuity (MCV)	http://mrsk.ca/AP/d1.5cont.pdf http://mrsk.ca/AP/ACv1.4continuity.pdf http://mrsk.ca/AP/CALCcontinuity.pdf	http://mrsk.ca/AP/LESSONcontinuity.pdf		http://17calculus.com/calc/02-continuity.php	http://education.ti.com/html/13_free_courses/calculus89_online/mod06/mod06_1.html	http://webspaceship.edu/mrsrenault/GeoGebra/Calculus/continuity_at_a_point.html
2days Limits Laws (MCV)	http://mrsk.ca/AP/ACv1.3limitsinvolvingInfinity.pdf http://mrsk.ca/AP/F1.2introLimits+Laws.pdf http://mrsk.ca/AP/F1.4oneSidedLimits.pdf http://mrsk.ca/AP/F1.6limitsWithInfinityAsymptotes.pdf		http://online.math.uh.edu/MATH1431/C1/53/index.html	http://17calculus.com/calc/02-infinite-limits.php http://17calculus.com/calc/02-indefinite-forms.php	http://education.ti.com/html/13_free_courses/calculus89_online/mod09/mod09_1.html	
2days Indeterminate Forms (MCV)	http://mrsk.ca/AP/d1.2mixOfLimits.pdf http://mrsk.ca/AP/ACv1.2indetermForms.pdf http://mrsk.ca/AP/d1.3infLimits.pdf http://mrsk.ca/AP/W-indeterminateForm.pdf http://mrsk.ca/AP/CALCinfiniteLimits.pdf http://mrsk.ca/AP/CALClimitsAtInfinity.pdf	http://mrsk.ca/AP/LESSONIndeterminateForms.pdf		http://17calculus.com/calc/02-finite-limits.php		
Trig Limits (AP)	http://mrsk.ca/AP/d1.6TrigLimits.pdf http://mrsk.ca/AP/ANSproofsTrigLimits.pdf	http://mrsk.ca/AP/7toReadProofTrigLimits.pdf	http://online.math.uh.edu/MATH1431/C1/54/index.html	http://17calculus.com/calc/02-triglimits.php http://17calculus.com/calc/02-saz-theorem.php		http://webspaceship.edu/mrsrenault/GeoGebra/Calculus/limit_trig_sin.html
Difference Quotient (MHF)	http://mrsk.ca/AP/ACv1.5roc.pdf	http://mrsk.ca/AP/LESSONroc.pdf			http://education.ti.com/html/13_free_courses/calculus89_online/mod07/mod07_1.html	Secant lines with limit http://www.personal.psu.edu/dp14/java/calculus/secantlines.html Derivative function http://www.personal.psu.edu/dp14/java/calculus/derivative.html
2days IVT (AP)	http://mrsk.ca/AP/IVT.pdf http://mrsk.ca/AP/F1.5continuity.pdf	http://mrsk.ca/AP/LESSONcontinuity.pdf		http://17calculus.com/calc/02-continuity.php	http://education.ti.com/html/13_free_courses/calculus89_online/mod08/mod08_1.html	http://webspaceship.edu/mrsrenault/GeoGebra/Calculus/continuity_at_a_point.html
Optional - Formal Definition of a Limit (AP)	http://mrsk.ca/AP/A2.6deltaEpsilonProofs.pdf	http://mrsk.ca/AP/vptLESSONepsilon-and-delta.pdf http://mrsk.ca/AP/LESSONepsilon-and-delta.pdf	http://online.math.uh.edu/MATH1431/C1/52/index.html			http://www.personal.psu.edu/dp14/java/calculus/limits.html http://webspaceship.edu/mrsrenault/GeoGebra/Calculus/limit_intuitive.html http://webspaceship.edu/mrsrenault/GeoGebra/Calculus/limit_intuitive_one_side.html
	Mix Practice http://mrsk.ca/AP/ApracticeTest.pdf http://mrsk.ca/AP/Areview.pdf http://mrsk.ca/AP/Areview-for-limits-quiz.pdf http://mrsk.ca/AP/Amore-limit-practice.pdf http://mrsk.ca/AP/Amore-limit-practice-2.pdf					

After explaining to a student through various lessons and examples that:

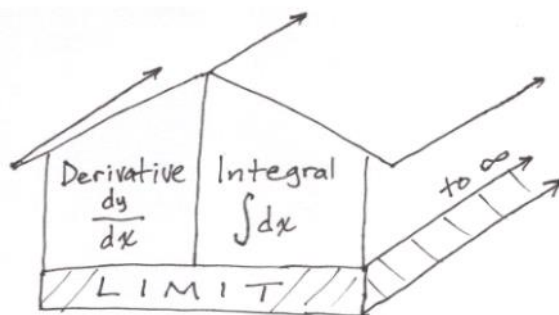
$$\lim_{x \rightarrow 8} \frac{1}{x-8} = \infty$$

I tried to check if she really understood that, so I gave her a different example.

This was the result:

$$\lim_{x \rightarrow 5} \frac{1}{x-5} = \infty$$

We are building the "House of Calculus."



Websites used:

- <http://web2.slc.qc.ca/mh/Math103/Default.htm>
- <http://www.horton.ednet.ns.ca/staff/wheadon/>
- <http://arsenaumath.wordpress.com/>
- <http://www.pages.drexel.edu/~mid85/math121/201225/>
- www.fredmath.net - now needs password