Math Analysis Honors Assignments
November 2008

Day	Date	#	Assignment	Topic
Fri	11/14	32	Worksheet #32	Solving Differential Equations by Separating Variables
Mon	11/17	33	p.338 33, 35, 37 & Worksheet #33	Integrating Even & Odd Powers of Sine and Cosine
Tues	11/18	34	p.338 47, 49, 51 Worksheet #34	Derivatives & Integrals of Inverse Trig Functions
Wed	11/19	35	p.170 1, 3, 5 & Worksheet #35	Related Rates
Thurs	11/20	36	p.251 1, 11, 13 & Worksheet #36	Related Rates / Limits at ∞
Fri	11/21	37	p.251 8, 14 & Worksheet #37	Review
Mon	11/24	38	p.137 23,24 & Worksheet #38	Review + Velocity & Acceleration
Tues	11/25	39	Worksheet #39	**Exam – Related Rates**
Wed	11/26	40	p.251 20–22 & Worksheet #40	Related Rates & Review
Thurs	11/27	Happy Thanksgiving ☺		
Fri	11/28			

Notes:

Worksheet #32: **http://www.geocities.com/brosenotes/area_using_calculator.pdf**

Worksheet #33: **http://www.geocities.com/brosenotes/integrals_even_odd.pdf**

Notes:
For **odd** powers: PEEL one of the sines or cosines, then substitute using:
$\sin^2 x = 1 - \cos^2 x$ and $\cos^2 x = 1 - \sin^2 x$.
For **even** powers: Use the substitutions: $\sin^2\square = \frac{1}{2}(1 - \cos 2\square)$ and $\cos^2\square = \frac{1}{2}(1 + \cos 2\square)$

Worksheet #34: **http//www.geocities.com/brosenotes/inverse_trig_derivatives.pdf**

Worksheet #35: **http://www.geocities.com/brosenotes/related_rates_notes.pdf**