

Math Analysis Honors Assignments

December 2008

Mon	12/1	41	Page 202 1,2 & Worksheet #41	Mean Value Theorem & Rolle's Theorem
Tues	12/2	42	Page 202 3,4 & Worksheet #42	Related Rates / Max./Min. Value of a Function
Wed	12/3	43	Page 202 5,6 & Worksheet #43	MVT, Rolle's & Review
Thurs	12/4	44	Page 202 7,8 & Worksheet #44	MVT, Rolle's & Review
Fri	12/5	45	Worksheet #45 & Page 395 #1	MEAN VALUE THEOREM EXAM

Notes:

<http://www.sosmath.com/calculus/diff/der11/der11.html>

Power Point Presentation on Mean Value Theorem:

<http://www.geocities.com/brosepowerpoint/powerpointcalculus.html>

MEAN VALUE THEOREM:

If: 1. Continuous $a \leq x \leq b$
 2. Differentiable $a < x < b$

Then: There is at least one point, c ,

Such that:
$$f'(c) = \frac{f(b) - f(a)}{b - a}$$

Check: $a < c < b$

ROLLE'S THEOREM:

If: 1. Continuous $a \leq x \leq b$
 2. Differentiable $a < x < b$
 3. $f(a) = f(b)$

Then: THERE IS AT LEAST ONE POINT, c ,

SUCH THAT:
$$f'(c) = 0$$

Check: $a < c < b$
