Outline and review problems for Midterm III

MATH 175, Fall 2014

The test will be closed-notes, closed book, without using calculators Briggs & Cochran: 9.3, 9.4, 9.5, 9.6, 10.1, 10.2

1. Determine if a series converges or diverges. State the test used. Showing proper work and using proper notation is important.

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9.3: #19, 23, 25, 27, 29, 31, 33, 35, 37

9.4 #15, 19, 23, 25, 31, 47, 49

9.5 #5, 9, 11, 13, 19, 21, 23, 27, 31, 33, 41, 43, 45, 47

9.6 # 11, 15, 17, 21, 23
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2. Determine if a test is absolutely convergent, conditionally convergent, or divergent.

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9.6~\#41,~42,~44,~45,~47 (Even no. answers: \#42~\&~\#44 converge conditionally)
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3. Find the Taylor polynomial for a given n. 10.1 # 7 ab, 9 ab, 13a, 15a, 19a, 27a, 29a, 31a

 $4.\ \,$ Find the interval of convergence of a power series:

10.2 #9 - 19 (odd ones)