Calculus 2

Class 28: Monday April 14

Review for Exam 3

RECALL

Here are the titles of the Worksheets we have had since the last exam on Thursday March 17.

Class 21 *Introduction to Sequences and Series*

Class 22 *Introduction to Infinte Series*

Class 23 *Special Series: Geometric and Alternating*

Class 24 *Power Series*

Class 25 *Using Power Series To Represent Functions*

Class 26 *Introduction to Taylor and MacLaurin Series*

Class 27 *Applications of Taylor Polynomials*

Here are the titles of the Quizzes

Quiz 7 Infinite Series

Quiz 8 Power Series

BONUS 4 Advanced Infnite Seriess

Quiz 9 Taylor Series and Taylor Polynomials

Here are the topics covered in Lab

Lab 10 Convergence Tests for Infinite Series

Lab 11 Limits and Exotic Indeterminate Forms: ∞^0, 1^∞, 0^∞ and 0^0

Here are the Chapters covered in the textbook, *Single Variable Essential Calculus (Early Transcedentals)*

Section 8.1 *Sequences*

Section 8.2 *Series*

Section 8.3 *The Integral and Comparison Tests*

Section 8.4 *Other Convergence Tests*

Section 8.5 *Power Series*

Section 8.6 *Representing Functions as Power Series*

Section 8.7 *Taylor and Maclaurin Series*

Section 8.8 *Application of Taylor Polynomials*

GroupWork

What is the topic (or concept) that is still the most unclear to YOU right now?

What is the topic (or concept) that you are the most confident in your understanding and ability to answer questions about?

Exercise

Write down an example of an infinite series that you know converges and of another one that you know diverges. (Explain how you would prove that your given series converges or diverges.)