

Part I: (due at the beginning of class Wednesday, March 27)

Complete Example 2 and read the statement of the Integral Test (Theorem 1) on the blue Integral Test handout.

Remember that what you turn in for Part I should have 3 parts, as mentioned in the syllabus:

- (a) Your responses to the reading questions.
- (b) Your own questions/comments on the reading/anything else we've been doing in class.
- (c) The amount of time you spent on Part I (including the time spent reading/watching).

Part II: Exercises (prepare for class Wednesday, March 27)

Assuming the Integral Test works (we'll work on the proof on Wednesday in class), do Example 3 on the blue Integral Test handout.

Part III: Homework Problems (due Wednesday, March 27 at the beginning of class)

Review the guidelines and Sample Homework in the syllabus to make sure your Part III solutions follow them.

1. For which values of x will the series converge? Also give the sum of the series for those values of x (your answers for the sums will likely have x 's in them).

(a)
$$\sum_{n=0}^{\infty} \frac{(x-2)^n}{3^n}$$

(b)
$$\sum_{n=0}^{\infty} \frac{2^n}{x^n}$$

mini-Celebration of Learning Wednesday, March 27

The mini-Celebration of Learning may have problems on geometric series, telescoping series, series and their sequences of partial sums, or the n th Term Test for Divergence.