READING ASSIGNMENT 14

§11.4 (Absolute and Conditional Convergence)

Due 26 July 2018

LEARNING OBJECTIVES

By the end of this lesson, you will be able to:

- define absolute and conditional convergence for a series,
- determine absolute and conditional convergence of alternating series using the alternating series test or another method.

NAME:

REVIEW

• None.

READING

• Read §11.4 in the textbook.

QUESTIONS

(1) True or false?

(a) If
$$\sum_{n=0}^{\infty} |\alpha_n|$$
 diverges, then $\sum_{n=0}^{\infty} \alpha_n$ also diverges.

(b) If
$$\sum_{n=0}^{\infty} a_n$$
 diverges, then $\sum_{n=0}^{\infty} |a_n|$ also diverges.

(c) If
$$\sum_{n=0}^{\infty}\alpha_n$$
 converges, then $\sum_{n=0}^{\infty}|\alpha_n|$ also converges.

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(2) Give an example of a series that converges but not absolutely.