

Math 102 — Ratio test

Summary. Try each of the following problems together in a small group.

Problem 1. What does the ratio test tell us about each of the following series?

a. $\sum_{n=1}^{\infty} \frac{1}{n3^n}$

b. $\sum_{n=1}^{\infty} \frac{4^n}{n!}$

c. $\sum_{n=1}^{\infty} \frac{(-1)^n n^2}{n!}$

d. $\sum_{n=1}^{\infty} \frac{(n-1)!}{n^2}$

e. $\sum_{n=1}^{\infty} \frac{1}{n}$

f. $\sum_{n=1}^{\infty} \frac{(-1)^n}{n^2}$