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## 11.7: Strategy for testing series

Look at the form.

1)  $\sum \frac{1}{n^p}$

2)  $\sum ar^n$

3) Use comparison if similar to a geometric or p-series.

4) If it is obvious that  $\lim_{n \rightarrow \infty} a_n \neq 0$ , then use the test for divergence.

5) If of the form  $\sum (-1)^n b_n$ , use the alternating series test.

6) The ratio test is nice w/ factorials and products, but not on p-series.

7) If of the form  $\sum (b_n)^n$ , the root test works.

8) If  $a_n = f(n)$  and  $\int f(x) dx$  is known, use the integral test.