Instructions

Initially, just go through each series as quickly as you can to determine how you would test for convergence or divergence. Then go back through and (on your own paper) use the test and come back and fill in **Converges (C)** or **Diverges (D)**, and you can make a note about the test result. If not specified, you can assume the series starts at $n = 1$. The first one is done for you.

No.	Series	Best Test	C / D	Notes/Type
1.	$\sum_{n=1}^{\infty} \frac{1}{n^5}$	P=series	C	p-series with $p > 1$
2.	$\sum_{n=0}^{\infty} \left(\frac{3}{2}\right)^n$			
3.	$\sum_{n=1}^{\infty} \frac{n}{n+1}$			
4.	$\sum_{n=1}^{\infty} \frac{(-1)^{n-1}}{\sqrt{n}}$			
5.	$\sum_{n=1}^{\infty} \frac{n!}{100^n}$			
6.	$\sum_{n=1}^{\infty} \frac{1}{\sqrt[3]{n^2}}$			
7.	$\sum_{n=1}^{\infty} \frac{1}{n^2+1}$			
8.	$\sum_{n=1}^{\infty} \frac{2^n}{n^n}$			
9.	$\sum_{n=1}^{\infty} \frac{5n^2-3n}{n^3+2}$			
11.	$\sum_{n=2}^{\infty} \frac{1}{n(\ln n)^2}$			
13.	$\sum_{n=1}^{\infty} \frac{1}{n^2+5n+6}$			
14.	$\sum_{n=1}^{\infty} \frac{e^n}{n^3}$			
15.	$\sum_{n=1}^{\infty} \frac{1}{n!}$			
16.	$\sum_{n=1}^{\infty} \frac{\sin^2(n)}{n^2}$			
17.	$\sum_{n=1}^{\infty} \left(\frac{n+1}{2n}\right)^n$			
18.	$\sum_{n=1}^{\infty} (-1)^n \frac{n^2}{n^3+1}$			
20.	$\sum_{n=1}^{\infty} \frac{1}{\sqrt{n^3+4}}$			