

Determine if the SEQUENCES converge or diverge. If it converges, find its limit.

1. $a_n = \frac{n^2 - 7n + 3}{1 + 10n - 4n^2}$

2. $a_n = \frac{e^{5n}}{3 - e^{2n}}$

3. $a_n = \frac{\ln(n+2)}{\ln(1+4n)}$

Determine if the SERIES converge or diverge. Which test did you use?

4. $\sum_{n=1}^{\infty} \frac{1}{2n-1}$	5. $\sum_{n=1}^{\infty} \frac{n}{\sqrt{n^2+1}}$
6. $\sum_{n=1}^{\infty} \frac{1}{n^4 \sqrt{n}}$	7. $\sum_{n=1}^{\infty} \left(1 + \frac{1}{n}\right)^n$
8. $\sum_{n=1}^{\infty} \left(\frac{2}{3}\right)^n$	9. $\sum_{n=2}^{\infty} \frac{1}{n(\ln n)^3}$

	Series	Converges/ Diverges	Which Test?
10.	$\sum_{n=1}^{\infty} \frac{1}{\sqrt{n}}$		
11.	$\sum_{n=1}^{\infty} \frac{1}{n^2 + 1}$		
12.	$\sum_{n=1}^{\infty} \frac{2^{n+1}}{5^{n-1}}$		
13.	$\sum_{n=1}^{\infty} \frac{n+2}{n+1}$		