1. Use the ratio $\frac{a\_{n}}{a\_{n+1}}$ to determine if the following sequences are monotonic increasing, decreasing or neither.



1. Use the derivative test to determine if the following sequences are monotonic increasing, decreasing or neither.



1. Use the nth term test to stae if the series converges, diverges, or cannot tell.



1. Use the integral test to determine if the series converges or diverges



1. Use the comparison test test to determine if the series converges or diverges



1. Use the limit comparison test with the dominant term concept to determine if the series converges or diverges

