

QUIZ 10

Name _____

1. Does the sequence defined by $a_n = \frac{n2^n}{3^n}$ converge or diverge?
2. Decide whether or not the series $\sum_{n=2}^{\infty} 3^{-n}$ is a geometric series. If it is geometric determine whether or not it converges and if it converges find the sum..
3. Write the number $0.99999\overline{9}$ as $.9 + .09 + .009 + .0009 + .00009 + \dots$. This is a geometric series. Find a , r and the sum of the series.