1. Consider the sequence $\{z_n\}_{n=1}^{\infty}$ given by

     1. $z_n = \frac{4}{(-3)^{n-1}} - \frac{3}{3^{n-1}}$

     2. $z_n = \frac{(-1)^{n-1}n}{3n-2}$

Decide whether the series $\sum_{n=1}^{\infty} z_n$ converges or not.