## $\begin{array}{c} {\rm MATH~102\text{-}15~(172)} \\ {\rm QUIZ~\#~10} \end{array}$

NAME: ID. #:

Q1. Show that  $12 + 4 + \frac{4}{3} + \frac{4}{9} + \frac{4}{27} + \dots$  is a geometric series and find its sum.

Q2. Determine if the following sequence converges or diverges. If the sequence converges determine its limit.

$$\left\{\frac{e^{2n}}{n}\right\}_{n=1}^{\infty}$$