# 2020 SPRING CALCULUS 0412: QUIZ 2 (MARCH 19, 2020) 

NAME: STUDENTS ID:

1. (5 points) For what value of $r$ is the sequence $\left\{n r^{n}\right\}$ convergent?
2. (5 points) Suppose that $\sum_{n=1}^{\infty} a_{n}$ converges $\left(a_{n} \neq 0\right.$ for all $\left.n\right)$. Prove that $\sum_{n=1}^{\infty} \frac{1}{a_{n}}$ diverges.
