

King Fahd University of Petroleum and Minerals
Math. & Stat. Department
162-Math 102 Quiz (6)

Name	ID	SEC
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Q1) Determine if $\sum_{n=1}^{\infty} \frac{(-9)^n}{n10^{n+1}}$ is absolutely convergent, conditionally convergent, or divergent.

Q2) Determine if $\sum_{n=1}^{\infty} (\arctan n)^n$ is convergent or divergent.

Q3) Find the interval of convergence of $\sum_{n=1}^{\infty} \frac{(-2)^n}{3n} (x-1)^n$.

Q4) Find a power series representation for $f(x) = x^2 \tan^{-1}(x^3)$.