

King Fahd University of Petroleum and Minerals
Department of Math & Stat
Math 102, Section 37 (092)
Quiz 4

Name: _____

ID #: _____
(Show Your Work)

1. Determine whether the series $\sum_{n=1}^{\infty} \left(\frac{3}{n(n+3)} + \frac{5}{4^n} \right)$ is convergent or divergent. If it is convergent, find its sum. (6 points)

2. By using the comparison test, show that the series $\sum_{n=1}^{\infty} \frac{\ln n}{n}$ is a divergent series. (4 points)

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Quiz 5

Name: _____

ID #: _____
(Show Your Work)

1. Test for convergence for $\sum_{n=1}^{\infty} (-1)^n \frac{2n}{4n^2 + 1}$. (4 points)

2. Determine whether the series is absolutely convergent, conditionally convergent, or divergent for $\sum_{n=1}^{\infty} \frac{\cos(n\pi/3)}{n!}$. (6 points)