

King Fahd University of Petroleum and Minerals
Department of Math & Stat
Math 102, Section 07 (082)
Quiz 5

Name: _____

ID #: _____
(Show Your Work)

1. Test for convergence $\sum_{n=1}^{\infty} \frac{\sin\left(\frac{n\pi}{2}\right)}{n!}$. (7 points)

2. The interval of convergence of $\sum_{n=1}^{\infty} \frac{(-1)^{n-1}x^n}{n^3}$ is (3 points)

- (a) $(-1, 1)$
- (b) $[-1, 1]$
- (c) $[-1, 0) \cup (0, 1]$
- (d) $[-1, 1)$
- (e) $(-1, 1]$

King Fahd University of Petroleum and Minerals
Department of Math & Stat
Math 102, Section 02 (082)
Quiz 5

Name: _____

ID #: _____
(Show Your Work)

1. Test for convergence $\sum_{n=1}^{\infty} (-1)^{n-1} \frac{e^{1/n}}{n}$. (7 points)

2. The interval of convergence of $\sum_{n=1}^{\infty} \frac{(-1)^n x^n}{n+1}$ is (3 points)

- (a) $(-1, 1)$
- (b) $(-1, 1]$
- (c) $(-1, 0) \cup (0, 1]$
- (d) $[-1, 1]$
- (e) $[-1, 1)$

King Fahd University of Petroleum and Minerals
Department of Math & Stat
Math 102, Section 01 (082)
Quiz 5

Name: _____

ID #: _____
(Show Your Work)

1. Test for convergence $\sum_{n=1}^{\infty} (-1)^{n-1} \frac{\ln n}{n}$. (7 points)

2. The interval of convergence of $\sum_{n=1}^{\infty} \frac{x^n}{\sqrt{n}}$ is (3 points)

- (a) $(-1, 1)$
- (b) $[-1, 1)$
- (c) $[-1, 1]$
- (d) $(-1, 1]$
- (e) $[-1, 0) \cup (0, 1)$