KFUPM – Department of Mathematics and Statistics – Term 161

MATH 102

QUIZ # 5 Code 1 (Duration = 20 minutes)

NAME:_____ ID:_____ Section: _____

Exercise 1 (4 points)

Determine whether the series $\sum_{n=2}^{\infty} \frac{1}{n\ln(n)}$ is convergent or divergent.

Exercise 2 (3 points)

Determine whether the series $\sum_{n=1}^{\infty} \frac{2n+3}{\sqrt{n^3+1}}$ is convergent or divergent.

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Exercise 3 (3 points)

Determine whether the series $\sum_{n=1}^{\infty} \left(\frac{e}{n!}\right)^n$ is convergent or divergent.

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MATH 102

QUIZ # 5 Code 2 (Duration = 20 minutes)

NAME:_____ ID:_____ Section: _____

Exercise 1 (4 points)

Determine whether the series $\sum_{n=1}^{\infty} \frac{\tan^{-1}(n)}{1+n^2}$ is convergent or divergent.

Exercise 2 (3 points)

Determine whether the series $\sum_{n=1}^{\infty} [1 - \ln(2 + \frac{1}{n})]^n$ is convergent or divergent.

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Exercise 3 (3 points)

Determine whether the series $\sum_{n=1}^{\infty} \frac{\sqrt{n^3+2}}{2n+1}$ is convergent or divergent.

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QUIZ # 5 Code 3 (Duration = 20 minutes)

NAME:_____ ID:_____ Section: _____

Exercise 1 (4 points)

Determine whether the series $\sum_{n=2}^{\infty} \frac{1}{(n^2+1)\tan^{-1}(n)}$ is convergent or divergent.

Exercise 2 (3 points)

Determine whether the series $\sum_{n=1}^{\infty} \frac{n+1}{\sqrt{n^2+1}}$ is convergent or divergent.

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Exercise 3 (3 points)

Determine whether the series $\sum_{n=1}^{\infty} \frac{Ln(n)}{n!}$ is convergent or divergent.

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MATH 102

QUIZ # 5 Code 4 (Duration = 20 minutes)

NAME:_____ ID:_____ Section: _____

Exercise 1 (4 points)

Determine whether the series $\sum_{n=2}^{\infty} \frac{e^n}{1+e^{2n}}$ is convergent or divergent.

Exercise 2 (3 points)

Determine whether the series $\sum_{n=1}^{\infty} \frac{n^3+1}{\sqrt{n^7+1}}$ is convergent or divergent.

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Exercise 3 (3 points)

Determine whether the series $\sum_{n=1}^{\infty} \frac{1}{(n+1)!}$ is convergent or divergent.