KFUPM – Department of Mathematics and Statistics – Term 122

MATH 102

QUIZ4 # Code 1 (Duration = 20 minutes)

NAME:_____ ID:_____ Section: _____

Exercise 1 (5 points)

The sequence $\left\{\frac{\ln(n)}{n^2}\right\}_{n\geq 2}$ is:

Decreasing	
Increasing	
Neither increasing nor decreasing	
Divergent	
Convergent and its limit is 1	

Exercise 2 (5points)

The improper integral $\int_0^{+\infty} xe^{-x}\,dx$ is:

Convergent and its value is 1	
Convergent and its value is -1	
Convergent and its value is 0	
Convergent and its value is 2	
Divergent	

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MATH 102

QUIZ # 4 Code 2 (Duration = 20 minutes)

NAME:_____ ID:_____ Section: _____

Exercise 1 (5points)

The improper integral $\int_e^{+\infty} \frac{dx}{x(\ln x)^2}$ is:

Convergent and its value is 1	
Convergent and its value is -1	
Convergent and its value is 0	
Convergent and its value is 2	
Divergent	

Exercise 2 (5points).

The sequence $\left\{ \frac{e^n}{n^2} \right\}_{n \geq 3}$ is:

Increasing	
Decreasing	
Neither increasing nor decreasing	
Convergent	
Has an upper bound	