KFUPM – Department of Mathematics and Statistics – Term 112

MATH 102

QUIZ # 1 Code 1 (Duration = 15 minutes)

NAME:_____ ID:_____ Section: _____

Exercise 1 (5 points)

The limit $\lim_{n\to\infty}\sum_{i=1}^{i=n}\frac{1}{n}\ln(\frac{n+i}{n})$ can be expressed as:

a/ $\int_0^1 \ln(x)dx$	
b/ $\int_0^1 \ln(x+1)dx$	
c/ $\frac{1}{2}\int_0^2 \ln(x)dx$	
d/ $\frac{1}{2}\int_0^2 \ln(x+1)dx$	
e/ $\int_0^1 x\ln(x)dx$	

Exercise 2 (5 points)

If $F(x)=\int_{2x}^{x^2}(Lnt)dt$, then $F'(1)$ is:

a/ 0	
b/ - 2ln2	
c/ 2ln2	
d/ ln2	
e/ 4ln2	

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QUIZ # 1 Code 2 (Duration = 15 minutes)

NAME:_____ ID:_____ Section: _____

Exercise 1 (5 points)

The limit $\lim_{n\to\infty}\sum_{i=1}^{i=n}\frac{1}{n}\ln(\frac{4n+i}{n})$ can be expressed as:

a/ $\int_0^1 \ln(x+4)dx$	
b/ $\int_0^1 \ln(x)dx$	
c/ $\frac{1}{4}\int_0^4 \ln(x)dx$	
d/ $\frac{1}{4}\int_0^4 \ln(x+1)dx$	
e/ $\int_0^1 x\ln(x)dx$	

Exercise 2 (5 points)

If $F(x)=\int_{2x}^{e^{2x}}\frac{dt}{t}$, then $F'(1)$ is:

a/ 1	
b/ 2	
c/ 0	
d/ e	
e/ $\frac{1}{e}$	