KFUPM – Department of Mathematics and Statistics – Term 122

MATH 102

QUIZ # 1 Code 1 (Duration = 20 minutes)

NAME:		ID:	Section:
Exercise 1 (3 points)			
The area under the	curve of the function	$f(x) = x^2 - 1 \text{ on the}$	interval [0, 1] is the limit of the
following Riemann	sum:		
$1+3n-4n^2$			
$a/\frac{1+3n-4n^2}{6n^2}$			
$b/\frac{1+3n+4n^2}{6n^2}$			
$6n^2$			
$c/\frac{1-3n+4n^2}{6n^2}$			
$6n^2$			
$\frac{3n}{d} + \frac{1 + 3n - 4n^2}{d}$			
6 <i>n</i>			
$\frac{6n}{e^{\frac{1+3n-4n^2}{6n^3}}}$			
$6n^3$			
Exercise 2 (3 points)			
$\text{If} g(x) = \int_{x^2}^{x^4} \sqrt{t} dt$	t, then $g''(1)$ is:		
a/ 16			
b/ -16			
c/ 1	_		
1/ 1	_		
d/ -1			
e/ 3			
1	1		

Exercise 3 (4 points) Evaluate the indefinite integral $\int \frac{xe^{x^2}dx}{e^{x^2}+1}$.

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QUIZ #1 Code 2 (Duration = 20 minutes)

NAME:______ID:______Section: _____

Exercise 1 (3 points)
The area under the curve of the function $f(x) = x^2 + 1$ on the interval [0, 1] is the limit of the
following Riemann sum:
$1 + 2n + 9n^2$
$a/\frac{1+3n-8n}{6}$
1 + 2 + 0 2
$\frac{a\sqrt{\frac{1+3n-8n^2}{6n^2}}}{b\sqrt{\frac{1+3n+8n^2}{6n^2}}}$
602
$c/\frac{1-3n-8n^2}{2}$
$ \frac{c/\frac{1-3n-8n^2}{6n^2}}{d/\frac{1+3n+8n^2}{6n}} $ $ \frac{c/\frac{1+3n+8n^2}{6n}}{6n} $
$d/\frac{1+3n+8n^2}{2}$
6n
$e^{\frac{1+3n+8n^2}{2}}$
$6n^3$
Exercise 2 (3 points)
If $g(x) = \int_{x}^{\sqrt{x}} t^2 dt$, then $g''(1)$ is:
$a/\frac{1}{4}$
7
$\frac{4}{b/\frac{-7}{4}}$
1
$\frac{c}{2}$
$ \frac{4}{c} \frac{1}{2} $ $ \frac{d}{-\frac{1}{4}} $ $ \frac{-3}{4} $
$e/\frac{3}{4}$

Exercise 3 (4 points) Evaluate the indefinite integral $\int \frac{Ln(x)dx}{x(Ln(x)+1)}$.