KFUPM	Term 162	Date: 19/2/2017
Mathematics & Statistics	MATH 102	Duration: 25 minutes
	Quiz# 1	
Name:	ID #:	Section:

Q1. Without evaluating the integral, show that $8 \leq \int_{-2}^{2} \sqrt{4+x^2}\, dx \leq 8\sqrt{2}$

Q2. Using three approximating rectangles and midpoints, the area under the graph of $f(x) = \frac{x}{x-1}$ from x=2 to x=8 is approximately equal to

Q3.Find $\lim_{n\to\infty} \frac{2}{n} \sum_{i=1}^{n} \frac{1}{1+\left(\frac{i-1}{n}\right)^2}$

Q4. Find the derivative of the function $f(x) = \int_{\cos x}^{\sin x} \ln(1+2t)\, dt$