KFUPM | Term 122 | Date: 10/2/2013

Mathematics & Statistics | MATH 102 | Duration: 25 minutes

Quiz# 1

Name: | ID #: | Section 28 | Serial #:

Q1. If $f(x) = \int_1^x tan^{-1}u \ du$, then find *f*(1), *f'*(1), and *f''*(1).

Q2. Evaluate each of the following:

a. $\int \frac{y}{\sqrt{y+1}} \, dy$

b. $\int [\ln(e^x) + \ln(e^{-x})] dx$

P.T.O. →

Q3. Compute the following:

a. $\int_0^{\sqrt[4]{3}} \frac{w}{w^4+1}\,dw$

b. $\int_{-2\sqrt{2}}^{2\sqrt{2}} \left(4+\sqrt{8-t^2}\right)dt$

Q4. Find the area of the region bounded by the two curves of $y = 2 + |x-1|$ and $y = 7 - \frac{1}{5}x$.

With My Best Wishes