

KFUPM
Mathematics & Statistics

Term 172
MATH 102

Date: 11/3/2018
Duration: 20 minutes

Quiz# 4

Name:

ID #:

Section:

Q1: Evaluate $\int \sqrt{5 + 4x - x^2} dx$

Q2: Evaluate the following integral

$$\int \sin^{3/2}(x) \cos^3(x) dx$$

Q3. If $f(x) = \frac{9x^2+1}{x^3-x^2} = \frac{A}{x} + \frac{B}{x^2} + \frac{C}{x-1}$ then $A+B+C=$

Q4. Using the substitution $t = \tan(x/2)$, $-\pi < x < \pi$, we obtain

$$\int \frac{1}{2 + \sin(x) - \cos(x)} dx$$