King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math 101 (163) Sec 05 - Quiz 2

Name: ID: Serial No.:

1. A particle moves along a line so that its velocity at time t is $v(t) = \sin t$ (measured in meters per second). The distance traveled by the particle during the time period $0 \leq t \leq \dfrac{3\pi}{2}$ is equal to?

2. $\displaystyle\int_{\pi/6}^{\pi/2} (\csc x)(3\sin 2x + 5\sin x)dx =$

3. Find the area of the region enclosed by the curves $x+y^2-6=0$ and $y^2-x-2=0$

4. The volume of the solid generated by revolving the region enclosed by the curve $y=x^2$ and the line $y=1$ around the line $y=-1$, is equal to