

King Fahd University of Petroleum and Minerals
Department of Mathematics & Statistics
Math102.27
Semester 112
Quiz (2)

Name:

ID #:

Serial #:

1. Find the area of the region enclosed by $x = y^2$ and $y = x - 2$.

2. Find the area of the region enclosed by $y = x^2 - 2$ and $y = |x|$.

3. Evaluate the following integrals:

$$(a) \int \frac{2}{\sqrt{x} + 4x\sqrt{x}} dx$$

$$(b) \int (\sec x + \tan x)^2 dx$$

$$(c) \int_{-1}^{\frac{\sqrt{2}}{2}} \frac{1}{x\sqrt{4x^2 - 1}} dx$$

Good luck
Khaled Al-Anezy