

King Fahd University of Petroleum and Minerals
Department of Mathematics & Statistics
Math102.14
Semester 111
Vacation Quiz

Name:

ID #:

Serial #:

1. Evaluate:

(a) $\int x^3 \cos(x^2) dx$

Hint: use integration by parts and let $u = x^2$

(b) $\int \frac{x^3 + 2x - 1}{(x^2 - x - 2)^2} dx$

(c) $\int_0^{\pi/3} \tan^5 x \sec^4 x dx$

(d) $\int \frac{dx}{(5 - x - x^2)^{5/2}}$

Good luck
Khaled Al-Anezy