## MATHEMATICS 101 Section 211

Quiz #4, February 13, 2012

Show all your work. Use back of page if necessary. Calculators are not allowed.

Last Name:

First Name:

UBC Stud. No.:

1) Evaluate and simplify  $\int_0^{\frac{\pi}{2}} 15\sin^2(x)\cos^3(x) dx$ . (3 points)

2) Evaluate  $\int \frac{\tan^3(x)}{\cos^5(x)} dx$ . (3 points)

3) Evaluate and simplify completely  $\int \frac{x^2 dx}{\sqrt{16 - x^2}}$ . (4 points)