232 Quiz 8

November 11, 2011.

Section: _____ **Name:** _____

Work individually. You may use your Notebooks but no other materials and no technology.

1. For each integral below, describe a method that will work but DO NOT SOLVE THE INTEGRAL HERE. Here are just a few examples of proper descriptions:

substitution with $u =$ ____ and $du =$ ____

rewrite the integral as ____, then substitution with $u =$ ____ and $du =$ ____

parts with $u =$ ____, $du =$ ____, $v =$ ____, and $dv =$ ____

partial fractions decomposition of the form _____ (do not solve for coefficients)

trig substitution with $x =$ _____ and $dx =$ _____

algebra/identity to rewrite as _____ and then ⟨describe method⟩

a) $\int \sec^3 x \tan^3 x \, dx$ read the instructions carefully before starting

b) $\int (16 - 9x^2)^{-\frac{3}{2}} \, dx$