

## 232 Quiz 8

April 6, 2012

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  $u = \underline{\hspace{2cm}}$  and  $du = \underline{\hspace{2cm}}$

rewrite the integral as  $\underline{\hspace{2cm}}$ , then substitution with  $u = \underline{\hspace{2cm}}$  and  $du = \underline{\hspace{2cm}}$

parts with  $u = \underline{\hspace{2cm}}$ ,  $du = \underline{\hspace{2cm}}$ ,  $v = \underline{\hspace{2cm}}$ , and  $dv = \underline{\hspace{2cm}}$

partial fractions decomposition of the form  $\underline{\hspace{2cm}}$  (do not solve for coefficients)

trig substitution with  $x = \underline{\hspace{2cm}}$  and  $dx = \underline{\hspace{2cm}}$

algebra/identity to rewrite as  $\underline{\hspace{2cm}}$  and then (describe method)

a)  $\int \sec^4 x \tan^4 x \, dx$

read the instructions carefully before starting

b)  $\int (9 + 25x^2)^{-\frac{3}{2}} \, dx$