**Math 252 Homework 16 Written Part Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

*Write legibly. Show your work. Graph neatly. Use a ruler for all straight lines.*

1. Consider the integral: .
   1. Sketch a graph of the area measured by the integral. Include scale numbers.
   2. Which endpoint makes the integral improper? Replace it with t, and rewrite the integral using a limit as t approaches the problem endpoint.
   3. Calculate the integral, showing your work clearly, and always writing complete steps.
2. Consider the integral: .
   1. Sketch a graph of the area measured by the integral. Include scale numbers.
   2. Which endpoint makes the integral improper? Replace it with t, and rewrite the integral using a limit as t approaches the problem endpoint.
   3. Calculate the integral, showing your work clearly, and always writing complete steps.