**Math 252 Homework 14 Written Part Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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

**Integration by Parts:**

1. Show how to integrate by filling in the blanks:



1. Explain why we choose u = x, instead of u = ex.
2. Show how to check your answer from problem 1 by taking a derivative:



1. Show how to integrate:



1. Show how to integrate:



1. Explain how we know that we shouldn't do problem 5 using integration by parts.