**QUIZ # 4 Problems**

(An answer, even if “correct” but lacking work, will NOT receive full credit!)

1. Use the definition of an improper integral to evaluate the following integrals.

(a) 

(b) 

(c) 

2. Determine whether the improper integral is convergent or divergent without solving the integral. Use an appropriate inequality to support your conclusion.

(a) 

(b) 

3. Complete the square in the denominator, make appropriate substitution, and integrate.



4. Evaluate the following integrals using the integration by parts.

(a) 

(b) 

(c) 

5. Find the integral  (Hint: Reappearing Integral)