MAC 2311 Hybrid Calculus I (S)

Name Quiz # 1 (2.1-2.3) Take Home. Show all work.

1. Given, simplify completely.

Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. If *f* (*x*) = and *g*(*x*) = *x*2, find:

(*f*  *g*)(*x*) =\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, (*g*  *f*)(*x*) =\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3) Evaluate exact without the use of a Calculator:

(a) Sin (5π/3)= ­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (b) csc (-2π/3) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4) The manager of a furniture factory finds that it costs $2200 to manufacture 100 chairs and $4800 to manufacture 300 chairs. Find a linear function that models cost C as a function of number of chairs N produced.

Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_