

Homework 1  
CMSC 653  
Coding Theory  
Dr. Lomonaco

**1 Problem 1**

Construct the multiplication table of the group given by the presentation:

$$(r, s \mid r^4 = s^2 = 1, sr = r^3s)$$

You may assume that the distinct group elements are:

$$1, r, r^2, r^3, s, rs, r^2s, r^3s$$