Worksheet 11

1. Complete the Cayley table for the symmetries of the equilateral triangle.
2. Let $\sigma = \sigma_1$ and $\tau = \tau_1$. Show that every element of the symmetry group of the equilateral triangle can be written in the form $\sigma^i\tau^j$ for some i, j satisfying $i = 0, 1$, or 2 and $j = 0$ or 1.