Dynamical Systems with Symmetry - ME225DS
Winter 2008

Homework #5 - Due Thursday, February 21, in class

1. (10 pts) Show that the dihedral group $D_n \cong Z_n \rtimes Z_2$.

2. (10 pts) Suppose A and B are isotropy subgroups of Γ. Show that if $A \subseteq B$, then $\mathrm{Fix}[B] \subseteq \mathrm{Fix}[A]$.

3. (20 pts) Show the isotropy lattice for the group $S_6 \times T^1$. For each isotropy subgroup, sketch a generic coupled oscillator system which is in the corresponding fixed point subspace.