# Dynamical Systems with Symmetry - ME225DS <br> Winter 2008 

Homework \#1-Due Tuesday, January 15, in class

1. (a) (10 pts) Describe the symmetry properties of each of the capital letters:

## ABCDEFGHIJKLM NOPQRSTUVWXYZ

(b) (2 pts) What state name has reflection symmetry when written horizontally?
(c) ( 4 pts ) What four state names have reflection symmetry when written vertically?
(d) (1 pt) Write down another word which has reflection symmetry when written horizontally.
(e) (1 pt) Write down another word which has reflection symmetry when written vertically.
(f) (2 pts) Write down a word which has $180^{\circ}$ rotational symmetry.
2. (10 pts) Describe the symmetry properties of the following flags:


United Kingdom

