MA111 — Homework #5
Due Monday, October 5

PLEASE WRITE NEATLY AND STAPLE YOUR PAGES TOGETHER!

1. I hope you can each find a digital camera to borrow or use, perhaps in your cell phone. Take photographs of three different things with different types of symmetries. Be creative and try to seek out interesting or unusual objects. Email them to me at lee@ms.uky.edu — put "SYMMETRY PHOTOS" in the subject line. (You don't have to print them out.) I will give you homework credit and post them on the course website. You may want to work together on this; e.g., two people can submit six different photos.

2. Create your own interesting finite shape with rotational and/or reflectional symmetry. Draw it very neatly and precisely on an unlined sheet of paper. State what type of symmetry it has (e.g., Z_6, D_5). I will give you extra credit if you can create a symmetrical form of your name, as in the examples we saw in the slides!

3. Chapter 11, pages 422–433, problems 36, 38, 40, 42, 43, 45.