Math 4230, Fall 2012
Homework #11
Due Friday, November 30, 2012

From J. Oprea, *Differential Geometry and Its Applications*:

§5.4: Exercises 5.4.2, 5.4.4, 5.4.8, 5.4.10 (Just explain why the flat torus can or cannot be embedded as a surface in $\mathbb{R}^3$), 5.4.15

§5.5: Exercises 5.5.2, 5.5.10 (Just show that I is an isometry, and read the rest for enlightenment!), 5.5.11, 5.5.13

§5.6: Read sections 5.6.1 and 5.6.2, and do Exercises 5.6.3, 5.6.4, 5.6.5, 5.6.6. (Type in the commands for the animation at the end of Exercise 5.6.6 and go "ooh, ahh.") I've put the necessary Maple procedures in a text file on my web site.