$\begin{array}{c} \text{Math 4230, Fall 2012} \\ \text{Homework } \#10 \\ \text{Due Friday, November 16, 2012} \end{array}$

From J. Oprea, $Differential\ Geometry\ and\ Its\ Applications$:

 $\S 5.2 \colon \text{Exercises 5.2.1, 5.2.2. 5.2.4, 5.2.12, 5.2.17}$