

Math 151c, Spring 2011

1. Construct an immersion of T^3 -point in \mathbf{R}^3 .
2. Show that the tangent bundle of $S^2 \times S^1$ is trivial by constructing three independent vector fields.
3. For Boy's surface (i.e. the immersion of the projective plane in \mathbf{R}^3 with one triple point) draw the preimage of the self-intersection locus as a graph on a projective plane.