

AME 60611

Homework 2

Due: Friday 4 September 2009, in class

1. Kaplan, p. 105: 2a
2. Kaplan, p. 116: 3c; plot the surface in x, y, u space.
3. Kaplan, p. 121: 3a,b; also plot lines of constant u and v in the x, y plane; plot lines of constant x and y in the u, v plane; find the metric tensor \mathbf{G} .
4. Kaplan, p. 121: 6
5. Kaplan, p. 159: 5f
6. Kaplan, p. 159: 6f
7. Kaplan, p. 166: 6b
8. Kaplan, p. 210: 1a
9. Course notes: 1.16, p. 47
10. Course notes: 1.17, p. 47