

Math 423 Differential Geometry Fall 2006

Homework 8: Intrinsic geometry of surfaces

Due Thursday Dec.7

1. 5.7 #3.
 2. 6.4 #2.
 3. 6.4 #3.
 4. 6.4 #4.
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Bonus Questions for those taking the course for four credits or for those who want more of a challenge.

5. Find the geodesics of the cone given by $z = \sqrt{x^2 + y^2}$. If you are unable to solve the differential equations completely you can leave your formulas for the geodesics in integral form.