MATH 150A FINAL EXAM WINTER 2001

PROBLEMS DUE MARCH 20, 2001.

Please hand in your work on $8\frac{1}{2}" \times 11"$ sheets of paper. Xerox from your notebook if appropriate.

Problems

A.2 - locus of centers of curvature
A.3 - $K > 0$ on closed surfaces in $E^3$
A.6 - lines of curvature on $z = xy$
A.10 - prolate spheroid
A.11 - $n \ddot{x} \dot{x} \ddot{y}$ and geodesics
6.13 - geodesics on a right circular cone. Careful figures.
A.5 - geodesics on a torus
A.8 - isometry of upper half plane and hyperbolic plane
A.7 - negation of Euclid V
A.10 - Von Staudt proof of Euclid theorem

Work independently. You may use any books or references - cite them properly. Cite any earlier collaborations on any of the problems.