

Math 570 - Homework #5
Due Monday, February 27, 2006

1. Give algebraic proofs of Propositions 23, 26, and 29 of Euclid's *Elements*, *Book IX*.
2. Using Ptolemy's theorem and the diagram given in problem #2 on page 195 of the textbook, find a formula for $\text{chord}(\alpha - \beta)$.
3. Solve problem #4 on page 195.