

MATHEMATICS 3100. Second Midterm Test.

March 7, 2003

The exam is “closed book, closed notes”. Bring compass and ruler to the test!

1. [20 points] State and prove the concurrence theorem for the angle bisectors of a triangle.
2. [20 points] State and prove theorem about relation between inscribed and central angle in a circle.
3. [20 points] Given segment of unit length in the plane, construct (using compass and ruler) a segment of the length $1/3$.
4. [20 points] Using compass and ruler construct all three altitudes in the given triangle.
5. [20 points] State and prove the law of sines in a triangle.