
Homework 2, due Friday 2/4

1. (25 points), p. 64, problem 9
2. (10 points), p. 65, problem 11
3. (10 points), p. 67, problem 7 (a), (b)
4. (10 points) Give an example of two geometries with six points each and the same number of lines which are not isomorphic.
5. (5 points) Assume (points,lines,incidence rule) is a geometry. Is it possible that we can 'add a line' to this geometry? I.e. can we add an element to the set of lines, and introduce incidence rules for this line, such that we get a geometry again?

If you have some time then read p. 58–62 in the book. We will not make use of this later, but it's a more 'rigorous' approach to projective planes than we did in class.