

Presentations09
Non-Euclidean Geometry

	Topic/Exercise	Presenter	
1	Look up and derive the Binet formula for the Fibonacci numbers.		
2	Look up and solve the Königsberg bridges problem.		
3	Show that the subset of the complex numbers $\{z = x + iy \mid z^2 = 1\}$ is a group with respect to the multiplication operator.		
4	Consider the function defined by: $f(x) = e^{-\frac{1}{x^2}}$ if $x \neq 0$ with $f(0) = 0$. Calculate $f'(0)$. [Hint: use L'Hôpital's rule.]		
5	Prove the AAS Theorem in the Neutral Geometry.		
6	Do one of the exercises (#1 - #10) on quadrilaterals in the neutral geometry. [Note that the figures are supposed to be hints.]		
7	Look up a problem on non-Euclidean geometry in your textbook to do.		