**5B Polar Graphs**

1. Sketch the Polar equation:



















In General

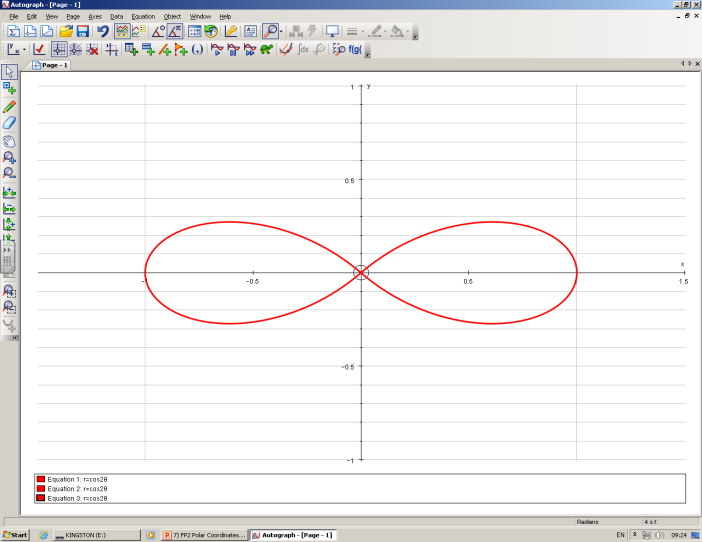
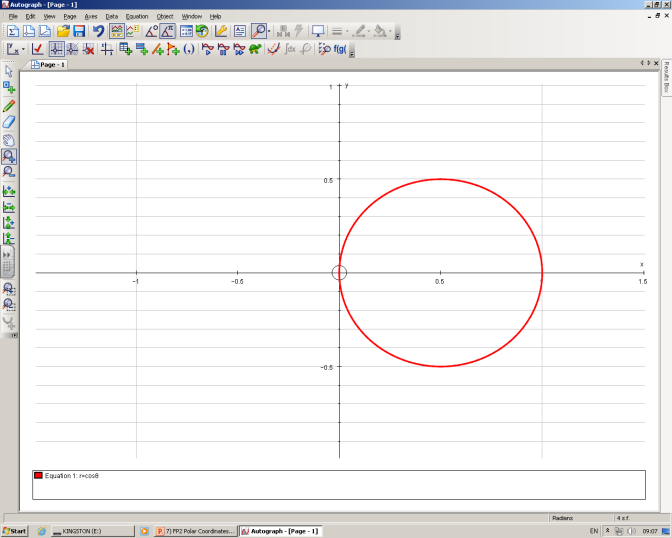
**p < q q ≤ p < 2q**

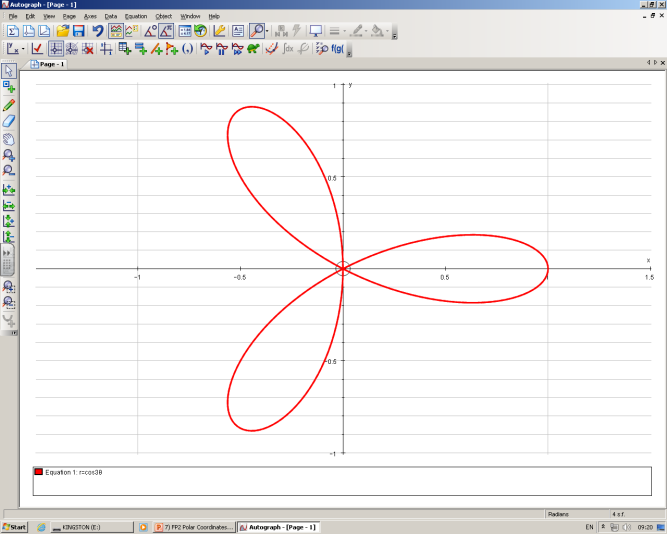
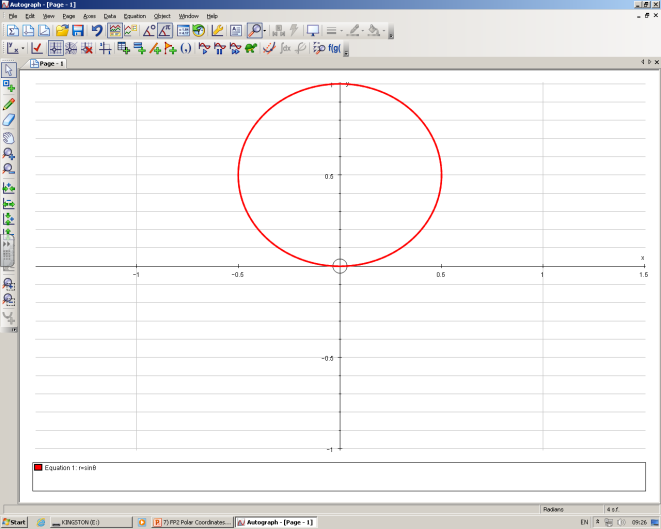
 

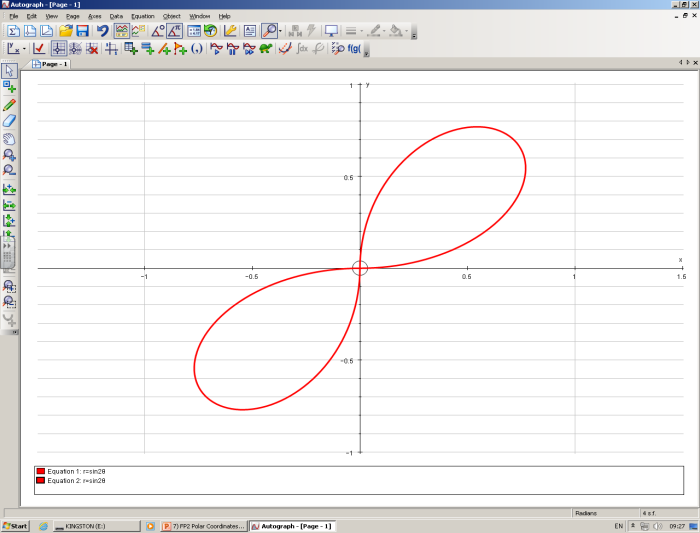
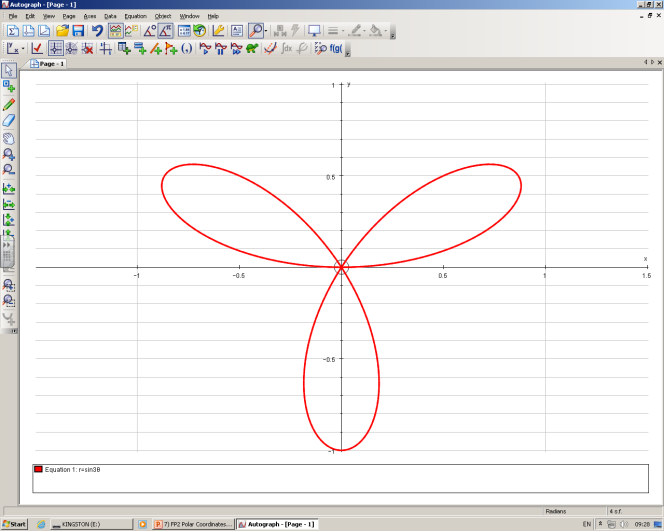
**p = q p ≥ 2q**

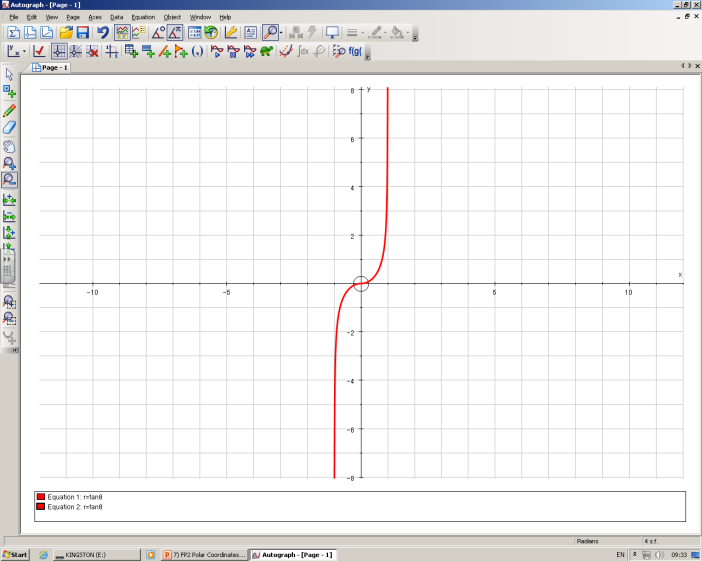
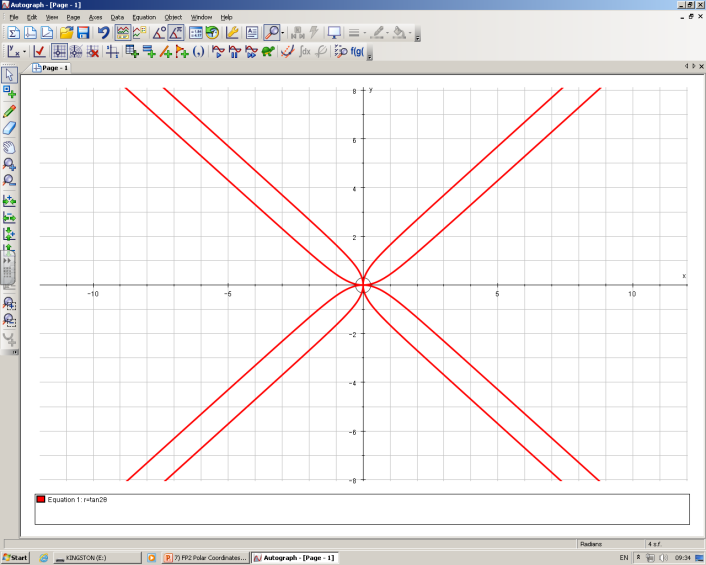
 

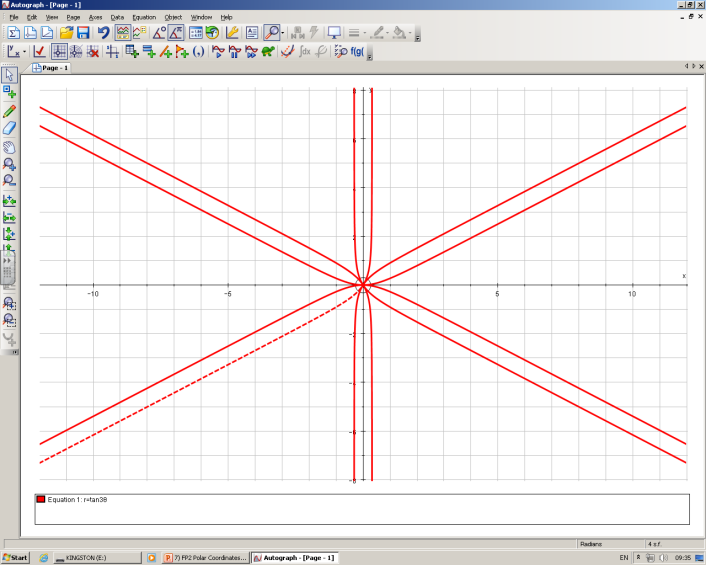
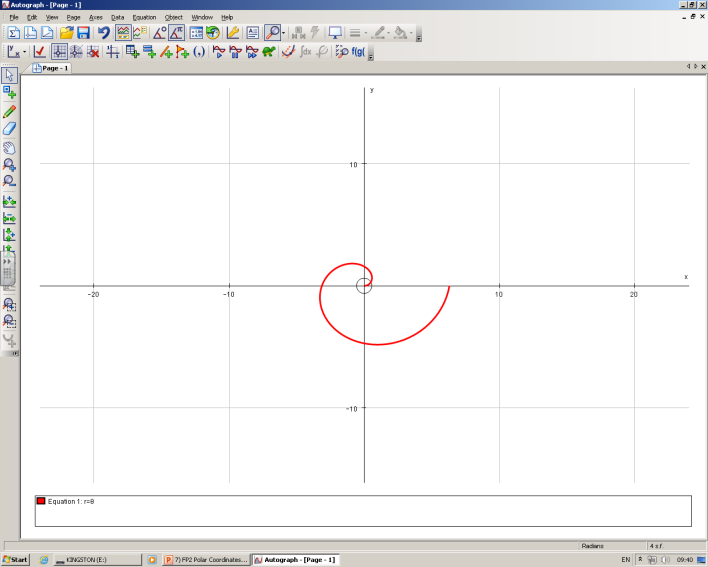
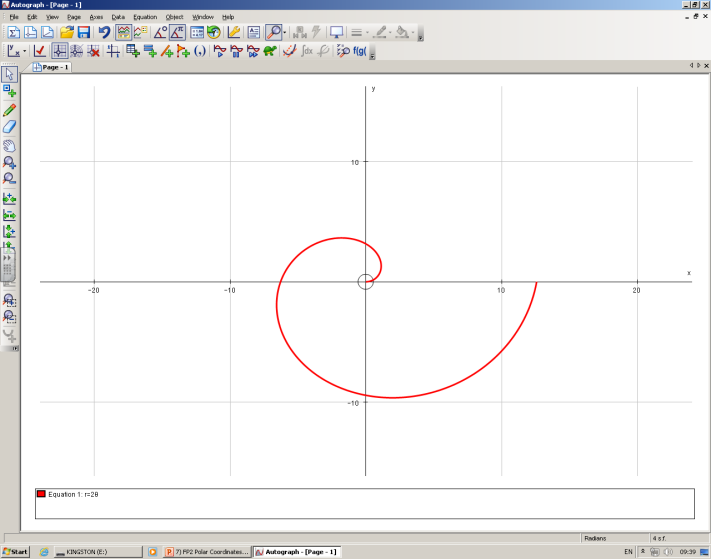
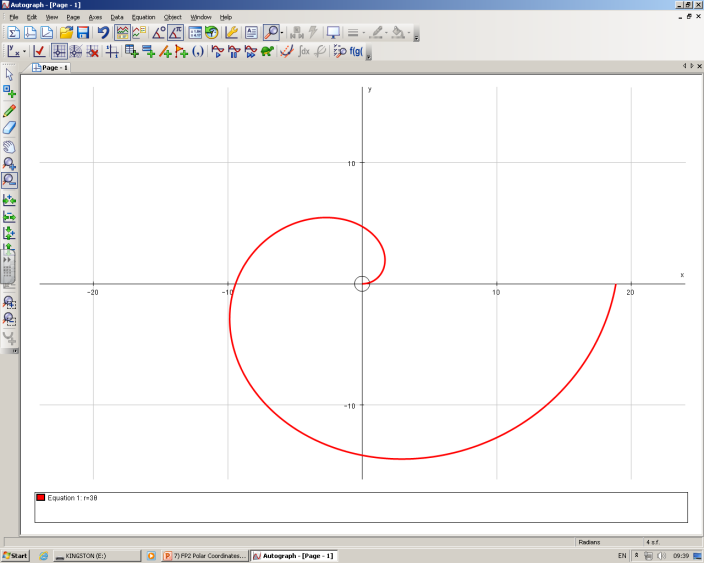
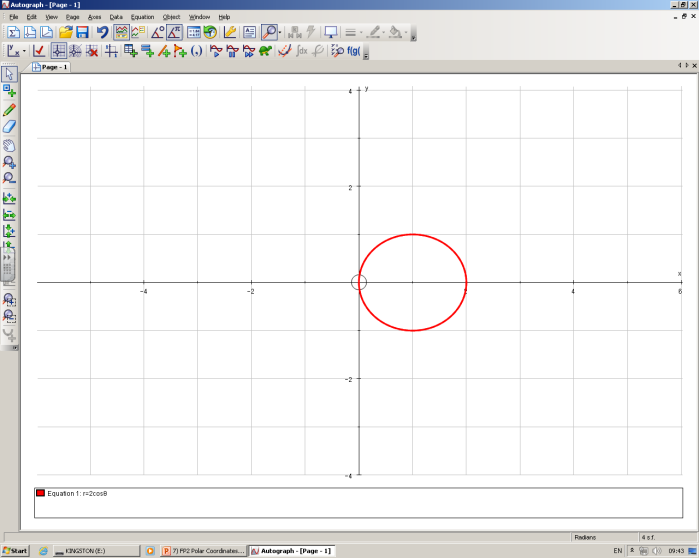
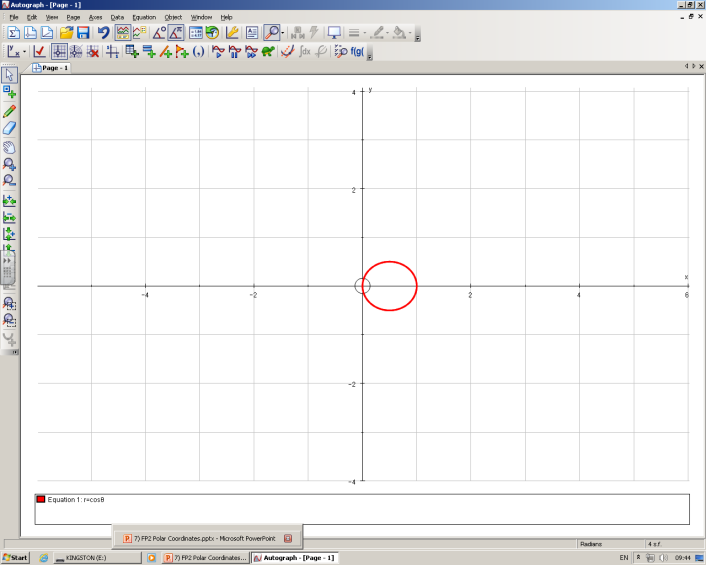
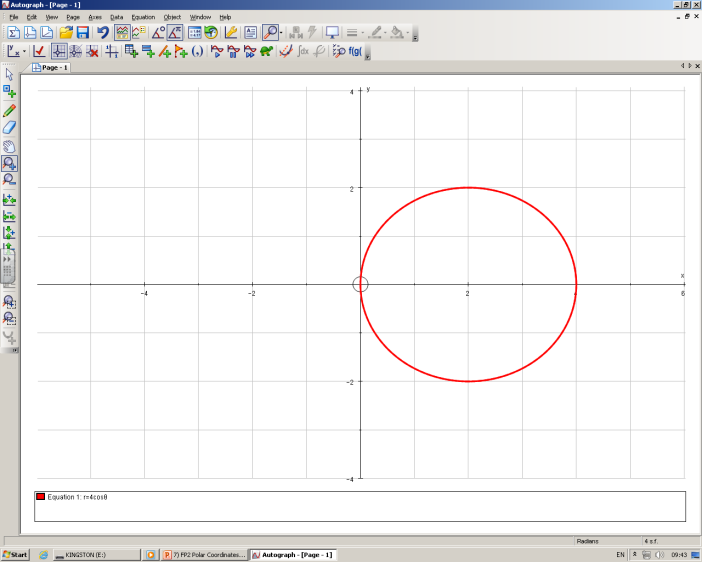
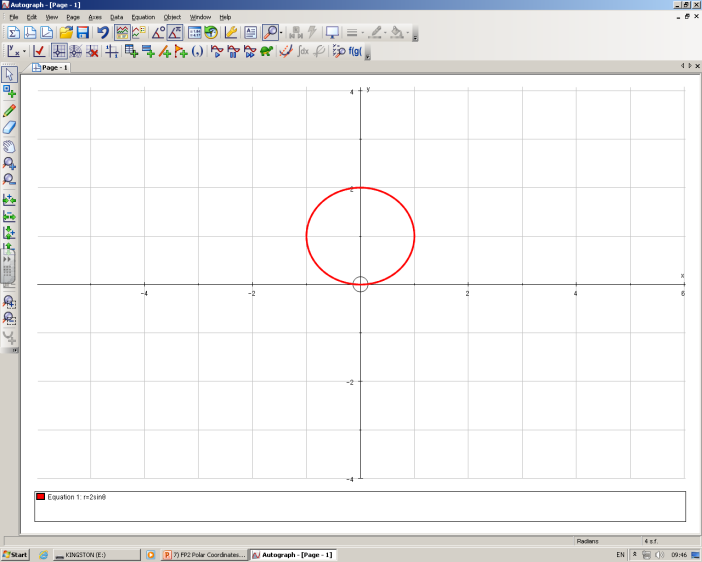
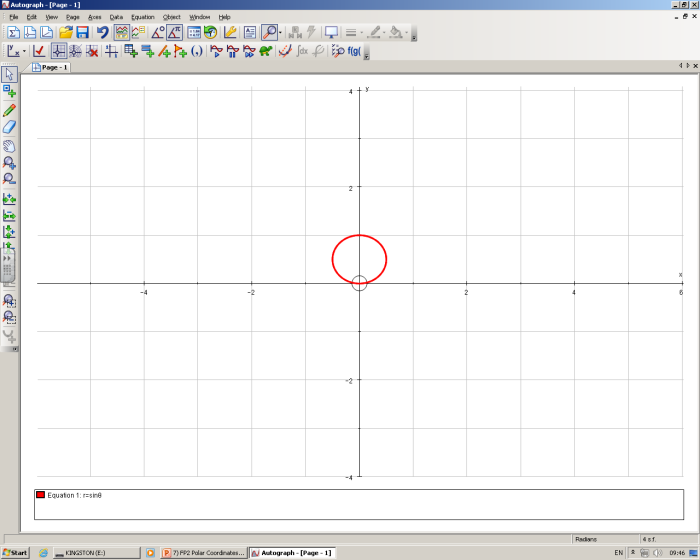
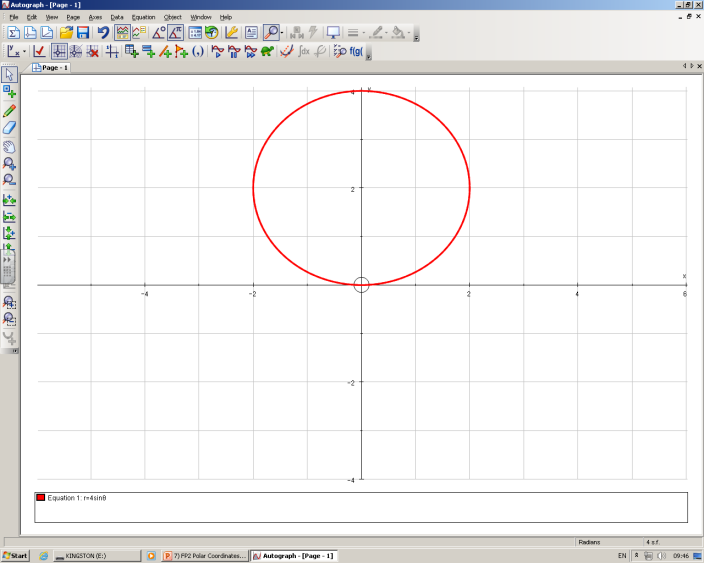
Some graphs to recognise:











1. Show on an argand diagram the locus of points given by the values of satisfying:



1. Show that the locus of points can be represented by the polar curve: