**2E Loci on Argand Diagrams**



1. Given that
2. Sketch the locus of z on an Argand diagram



1. Find the values of z that satisfy:
2. and



1. and



1. If
2. Sketch the locus of P(x,y) which is represented by z on an Argand diagram



1. Find the maximum value of argz in the interval (-π,π)



1. Use an algebraic method to find a Cartesian equation of the locus of z
2. Given that the complex number z = x + iy satisfies the equation:

Find the minimum and maximum values of |z|



Notes on Loci for |z-z1|=|z-z2|



1. Sketch the locus of P(x,y) which is represented by z on an Argand diagram, if:



1. Show that the locus is y = 3 using an algebraic method
2. Use an algebraic method to find the Cartesian equation of the locus of z if:
3. Represent the locus of z on a cartesian set of axes



Notes on Loci for argz = ɵ



1. If

Sketch the locus of P(x,y) which is represented by z on an Argand diagram. Then find the Cartesian equation of this locus algebraically.



1. If

Sketch the locus of P(x,y) which is represented by z on an Argand diagram. Then find the Cartesian equation of this locus algebraically.



1. If



Sketch the locus of z on an Argand diagram and use an algebraic method to find the equation of the line.