

Observations are as follows:

- (a) The plot forms an elliptical shape in the complex plane.
- (b) D makes the plot shift towards right (the centre is a more positive real number) as it increases.
- (c) When the matrix is real and symmetric, the plots collapse to horizontal lines, *i.e.*, all eigenvalues are only real numbers. D continues to have the same effect. Notably, if the matrix is skew symmetric, all plots collapse to vertical lines, and move *left* as D increases.