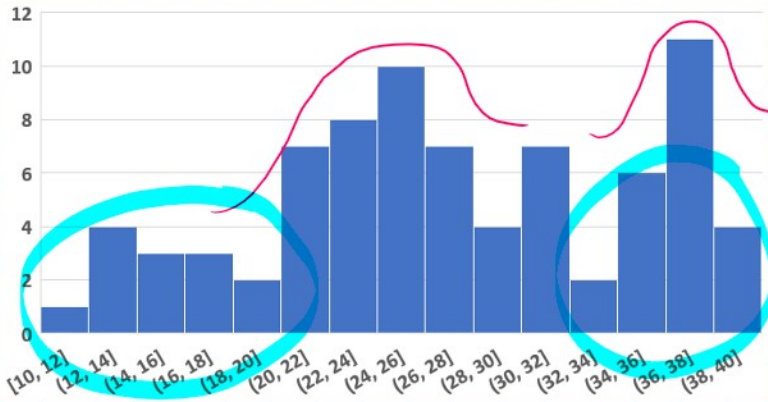


Midterm-2

Max Score: 39.5 ; Average 27.2



- If you score more than 80% in finals than lowest midterm will be replaced with final (only if midterm score < final score)

Equating the imaginary part.

$$u^2 + v^2 - 2u - \left(\frac{2}{x}\right)v + 1 = 0$$

Center:  $\left(1, \frac{1}{x}\right)$

Radius =  $\frac{1}{x}$

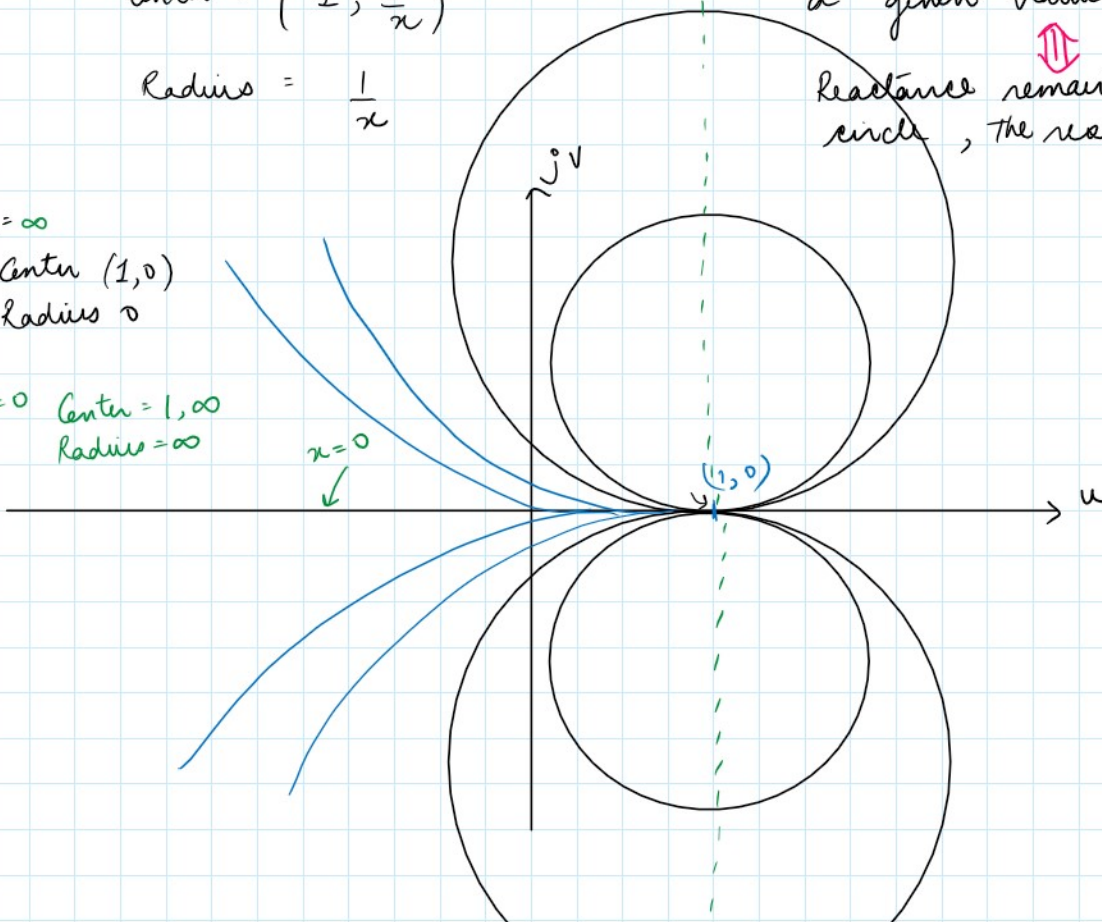
Constant Reactance Circle.

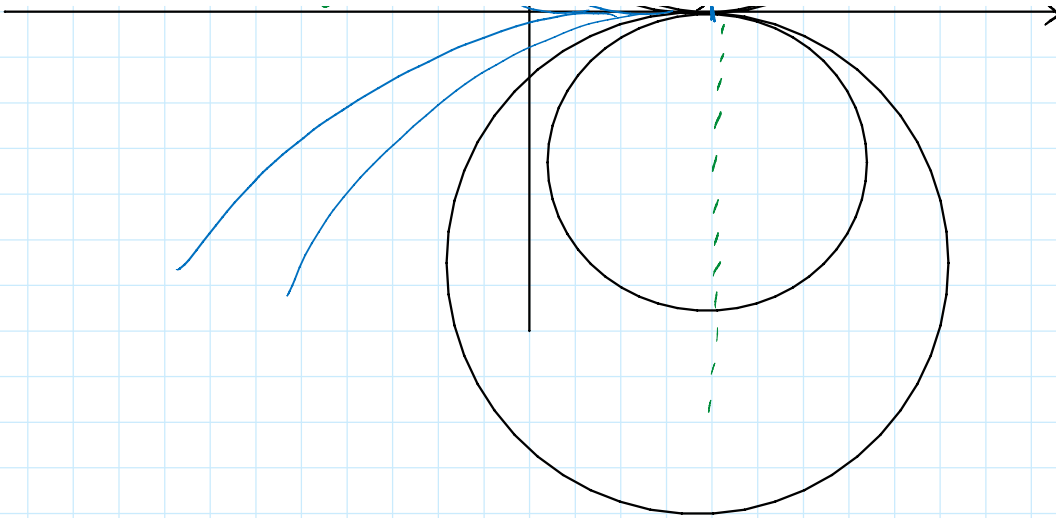
Locus of all resistance points for a given value of reactance.

Reactance remains same on a circle, the resistance can change

1)  $x = \infty$   
Center (1, 0)  
Radius 0

2)  $x = 0$  Center = 1,  $\infty$   
Radius =  $\infty$





Superimpose the constant  $r$  and constant  $x$  circles to on a complex  $\Gamma$  plane to get a Smith chart.