**POLAR PLOT**

Polar plot is a technique to design a plot of magnitude versus phase angle of sinusoidal transfer function G(jw) as w varies from 0 to ∞.

Polar plot is used for analysis and design of feedback control system by means of Nyquist criterion of complex signal (a + jb)

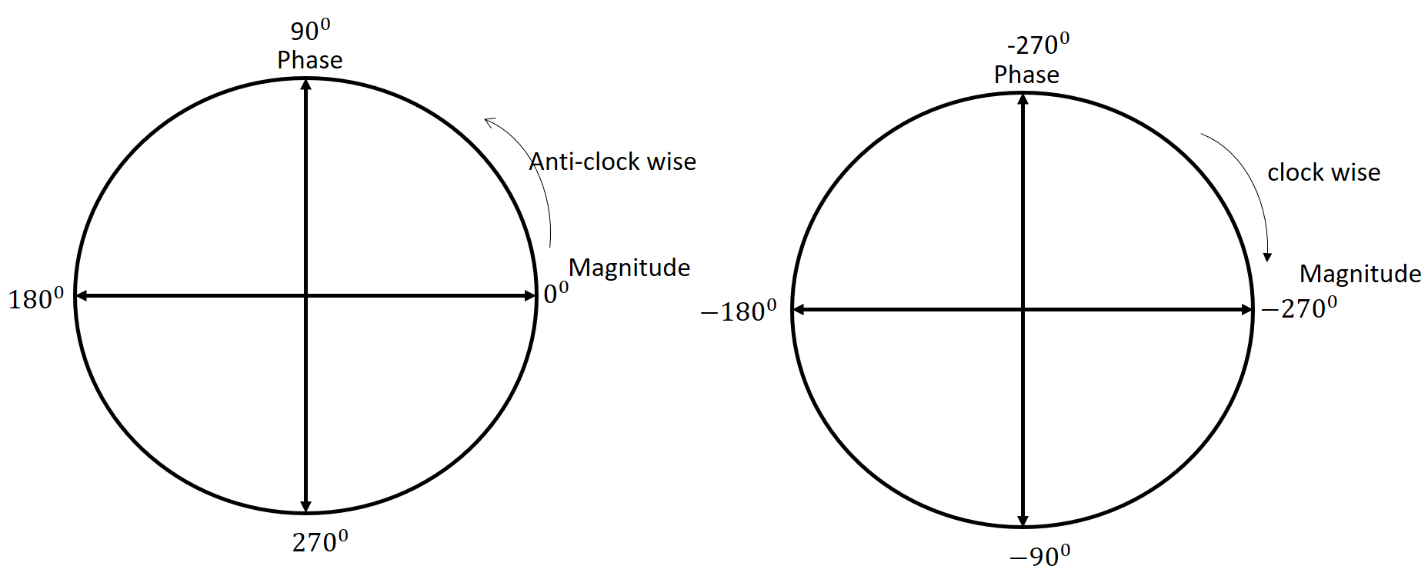
**SOLUTION**

**STEP-I: Put s = j ω in Equation (1)**

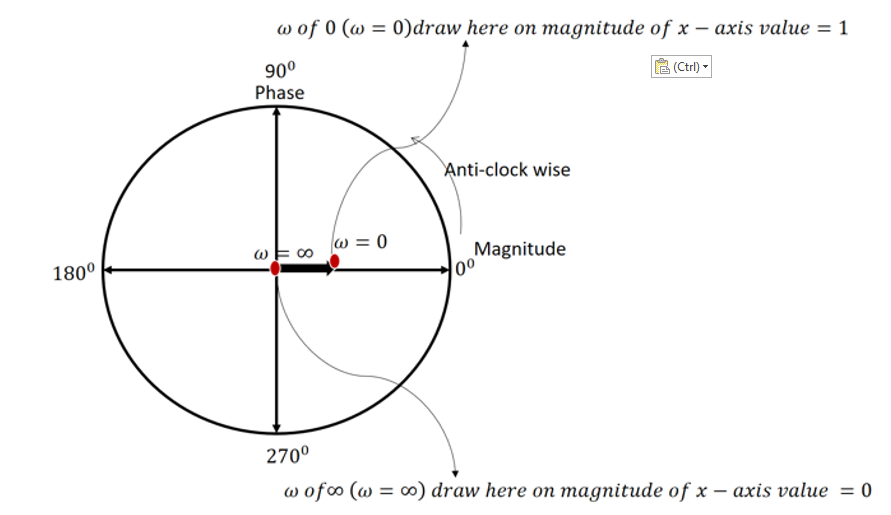
**STEP-II: Find the Magnitude and Phase angle of**

**STEP-III: Put the limit in Magnitude and Phase angle of**

**STEP-IV: Draw Polar Plot**



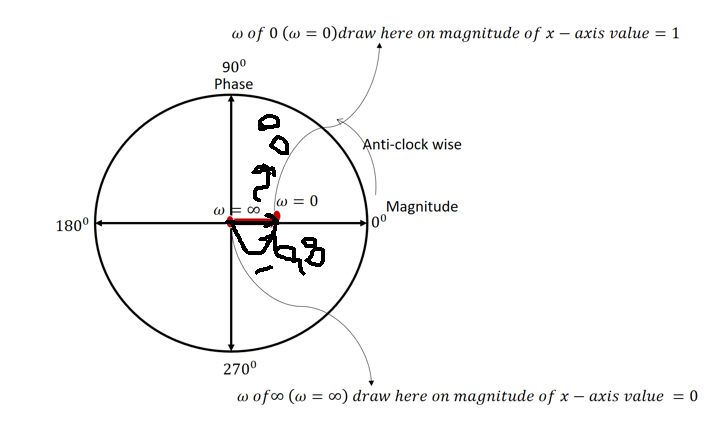
***Now we plotting of only***



***Now we Draw curves with the help of angle***

equal to zero then its angle is zero , we connect through one straight line

equal to infinity then its angle is -900 , we connect through one curve line



**SOLUTION**

**STEP-I: Put s = j ω in Equation (1)**

**STEP-II: Find the Magnitude and Phase angle of**

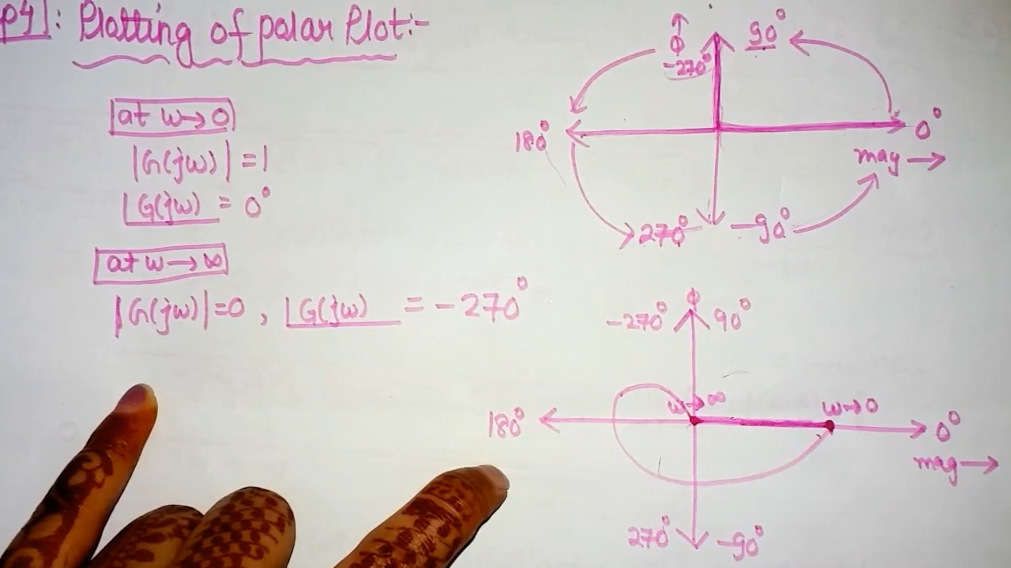
*In case of angle multiplication can be changed into addition*

Angle in division change into subtraction

**STEP-III: Put the limit in Magnitude and Phase angle of**

**STEP-IV: Draw Polar Plot**

***Now we plotting of only and also draw curves with the help of angle***



**SOLUTION**

**STEP-I: Put s = j ω in Equation (1)**

**STEP-II: Find the Magnitude and Phase angle of**

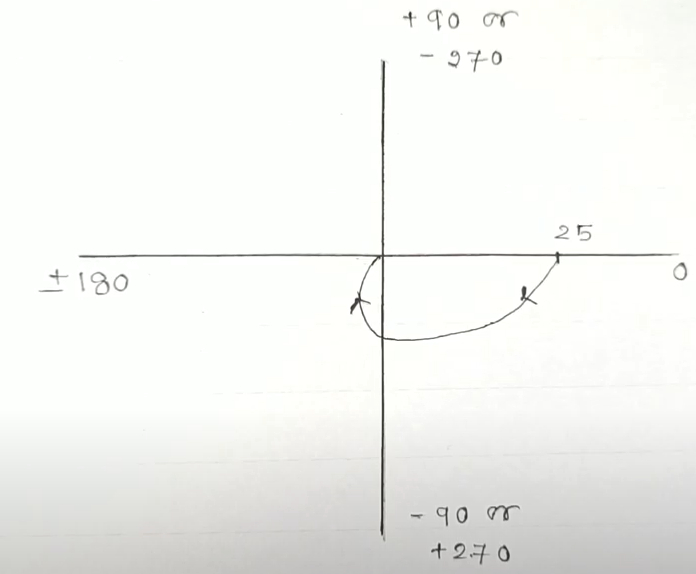
*In case of angle multiplication can be changed into addition*

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**STEP-III: Put the limit in Magnitude and Phase angle of**

**STEP-IV: Draw Polar Plot**

***Now we plotting of only and, also draw curves with the help of angle***



**SOLUTION**

**STEP-I: Put s = j ω in Equation (1)**

**STEP-II: Find the Magnitude and Phase angle of**

Angle in division change into subtraction

**STEP-III: Put the limit in Magnitude and Phase angle of**

**STEP-IV: Draw Polar Plot**

***Now we plotting of only and, also draw curves with the help of angle***

