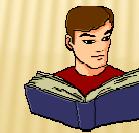


CONCEPTOS TEÓRICO-PRÁCTICOS SOBRE RESPUESTA EN FRECUENCIA Y DIAGRAMAS POLARES

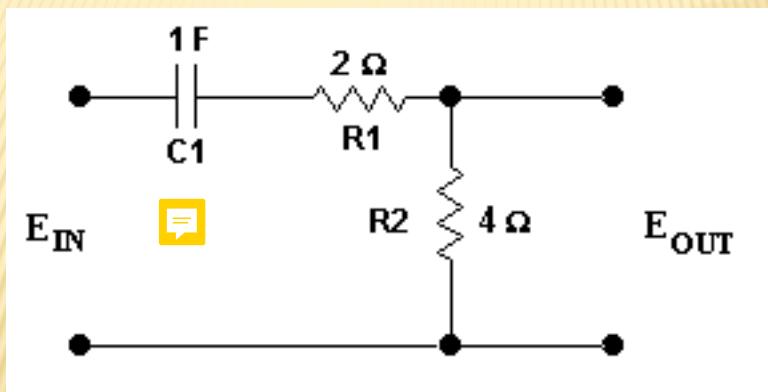


Por: Ing. Juan José García Abad

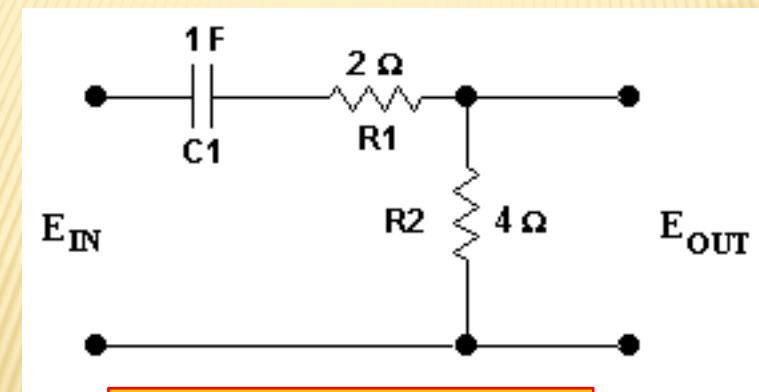
ESTOS CONCEPTOS
TEÓRICO Y PRÁCTICOS
SERAN DE UTILIDAD
PARA EL
CUESTIONARIO 2



DETERMINAR EL VALOR DE LA $F(p)$ PARA $\omega \rightarrow 0$ Y $\omega \rightarrow \infty$

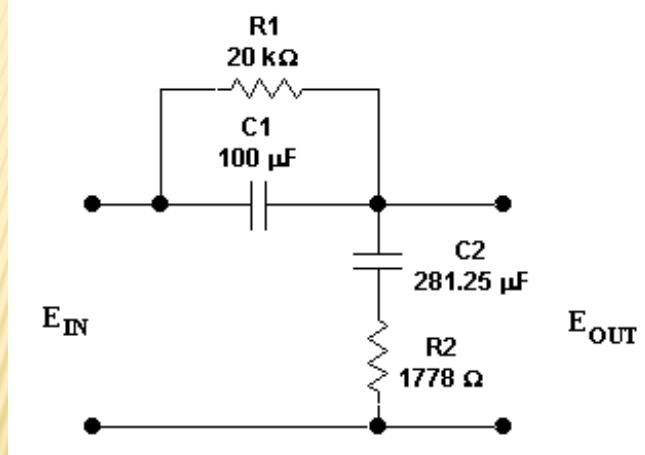


DETERMINAR EL VALOR DE LA $F(p)$ PARA $\omega \rightarrow 0$ Y $\omega \rightarrow \infty$

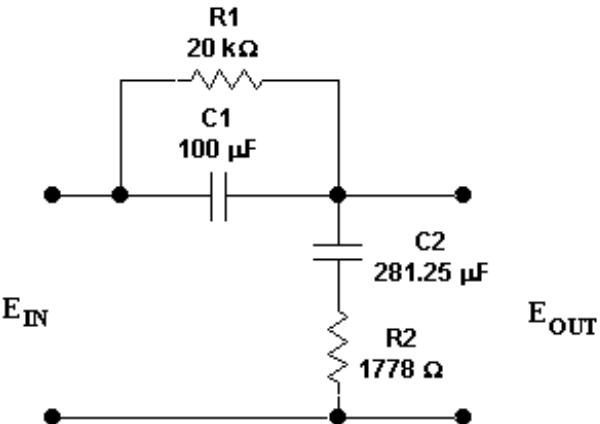


$$\begin{aligned}\omega \rightarrow 0 & \quad F(p) = 0 \\ \omega \rightarrow \infty & \quad F(p) = 0,666\end{aligned}$$

DETERMINAR EL VALOR DE LA $F(p)$ PARA $\omega \rightarrow 0$ Y $\omega \rightarrow \infty$

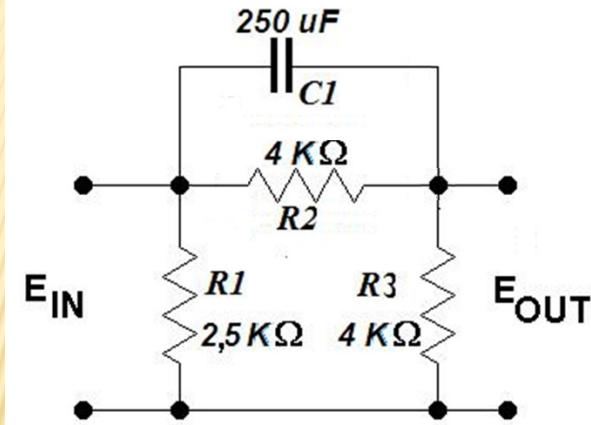


DETERMINAR EL VALOR DE LA $F(p)$ PARA $\omega \rightarrow 0$ Y $\omega \rightarrow \infty$

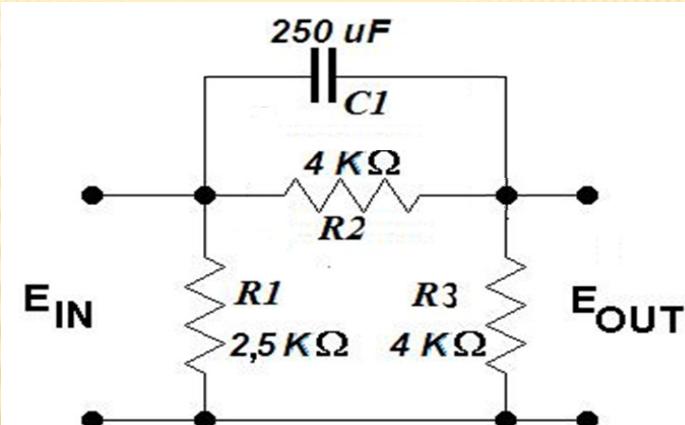


$$\begin{aligned}\omega \rightarrow 0 & \quad F(P) = 1 \\ \omega \rightarrow \infty & \quad F(P) = 1\end{aligned}$$

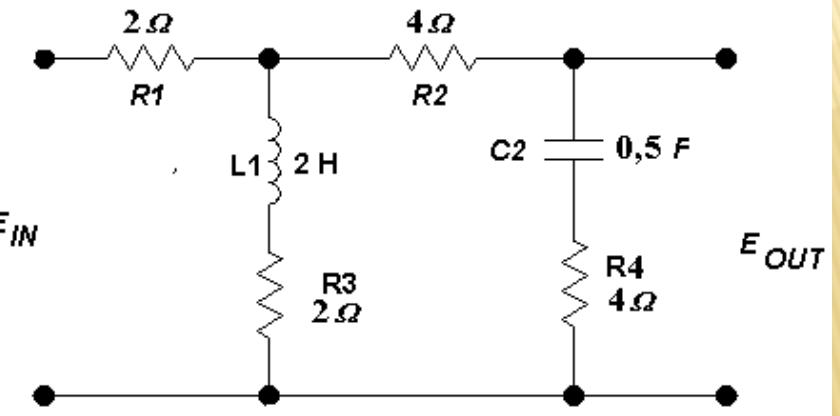
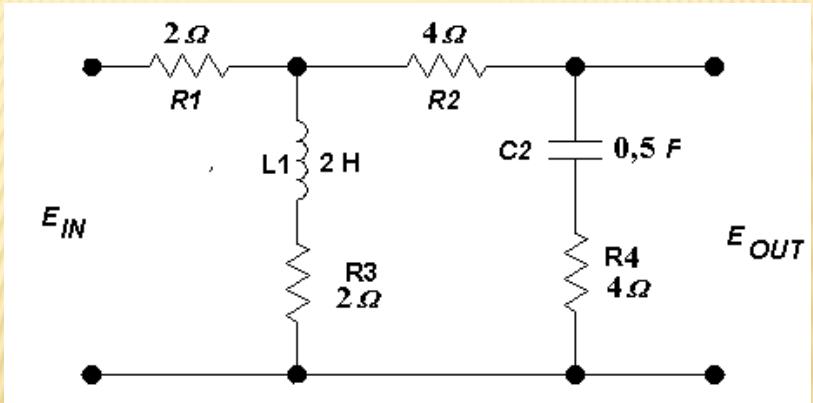
DETERMINAR EL VALOR DE LA $F(p)$ PARA $\omega \rightarrow 0$ Y $\omega \rightarrow \infty$



DETERMINAR EL VALOR DE LA $F(p)$ PARA $\omega \rightarrow 0$ Y $\omega \rightarrow \infty$

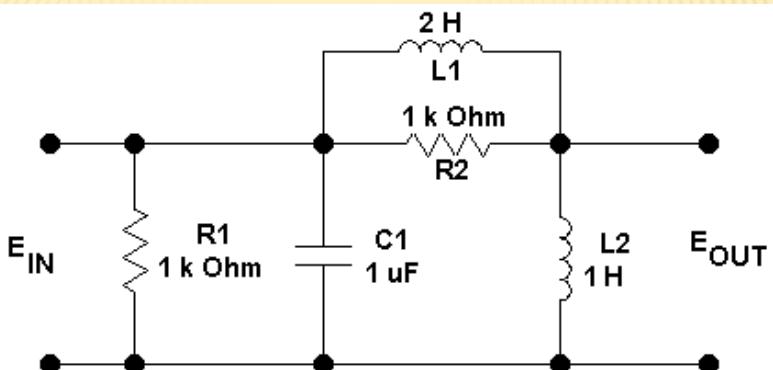


$$\begin{aligned}\omega \rightarrow 0 & \quad F(P) = 0,5 \\ \omega \rightarrow \infty & \quad F(P) = 1\end{aligned}$$

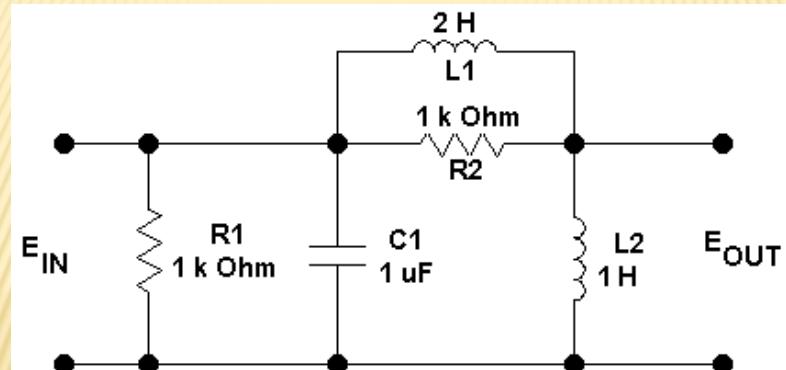


$$\begin{aligned}\omega \rightarrow 0 \quad F(p) &= 0,5 \\ \omega \rightarrow \infty \quad F(p) &= 0,4\end{aligned}$$

DETERMINAR EL VALOR DE LA $F(p)$ PARA $\omega \rightarrow 0$ Y $\omega \rightarrow \infty$



DETERMINAR EL VALOR DE LA $F(p)$ PARA $\omega \rightarrow 0$ Y $\omega \rightarrow \infty$



$$\begin{aligned}\omega \rightarrow 0 \quad F(p) &= 0 \\ \omega \rightarrow \infty \quad F(p) &= 0\end{aligned}$$

DETERMINAR EL VALOR DE LA $F(p)$ PARA $P \rightarrow 0$ Y $P \rightarrow \infty$

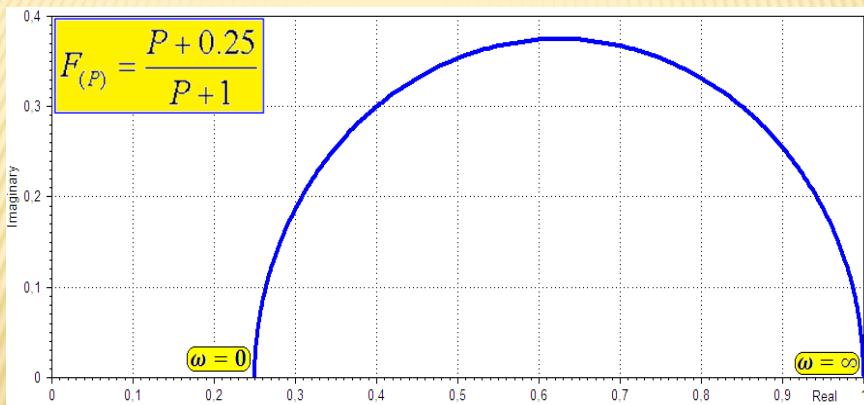
$$F_{(P)} = \frac{P + 0.25}{P + 1}$$

DETERMINAR EL VALOR DE LA $F(p)$ PARA $P \rightarrow 0$ Y $P \rightarrow \infty$

$$F_{(P)} = \frac{P + 0.25}{P + 1}$$

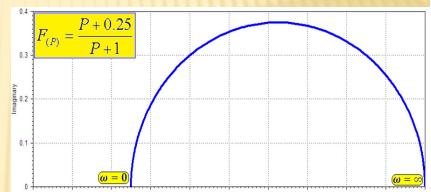
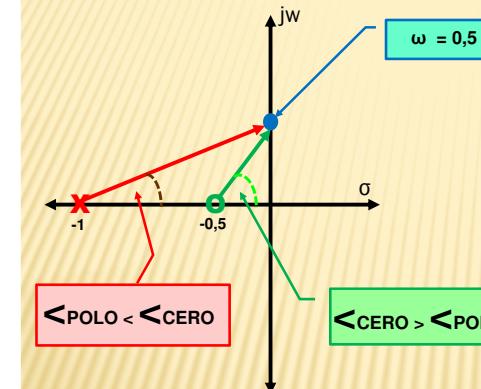
$$\begin{aligned} \omega \rightarrow 0 & \quad F(P) = 0 \\ \omega \rightarrow \infty & \quad F(P) = 0 \end{aligned}$$

DETERMINAR EL VALOR DE LA $F(p)$ PARA $P \rightarrow 0$ Y $P \rightarrow \infty$



$$\begin{aligned} \omega \rightarrow 0 & \quad F(P) = |0.25| \quad 0^\circ \\ \omega \rightarrow \infty & \quad F(P) = |1| \quad 0^\circ \end{aligned}$$

DETERMINAR EL VALOR DE LA $F(p)$ PARA $P \rightarrow 0$ Y $P \rightarrow \infty$



ADELANTA LA FASE

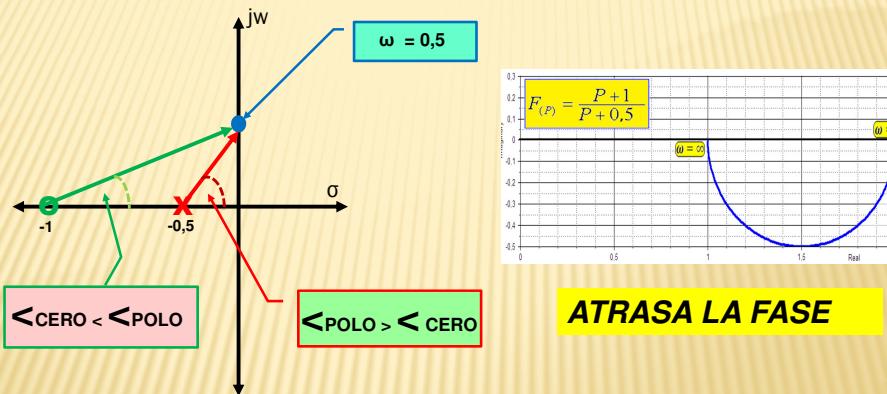
$$\begin{aligned} \omega \rightarrow 0 & \quad F(P) = |0.25| \quad 0^\circ \\ \omega \rightarrow \infty & \quad F(P) = |1| \quad 0^\circ \end{aligned}$$

DETERMINAR EL VALOR DE LA $F(p)$ PARA $P \rightarrow 0$ Y $P \rightarrow \infty$

$$F_{(P)} = \frac{P+1}{P+0,5}$$



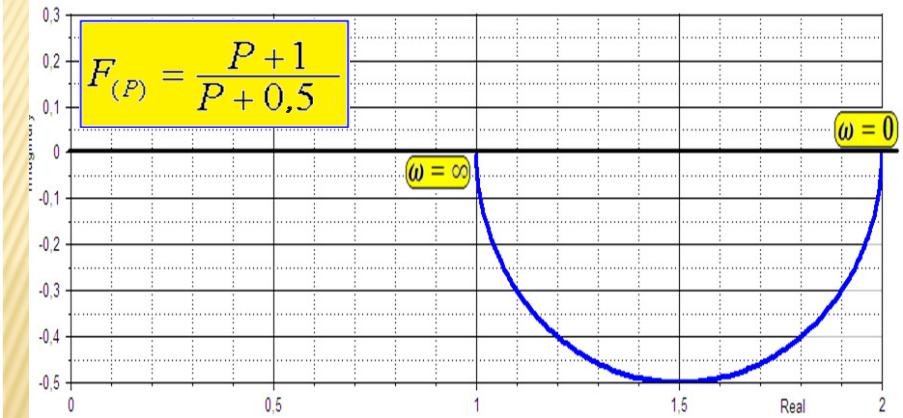
DETERMINAR EL VALOR DE LA $F(p)$ PARA $P \rightarrow 0$ Y $P \rightarrow \infty$



$$\omega \rightarrow 0 \quad F(P) = |2| \ 0^\circ$$

$$\omega \rightarrow \infty \quad F(P) = |1| \ 0^\circ$$

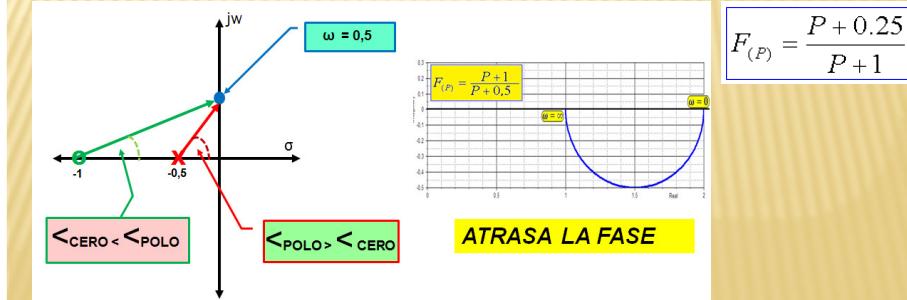
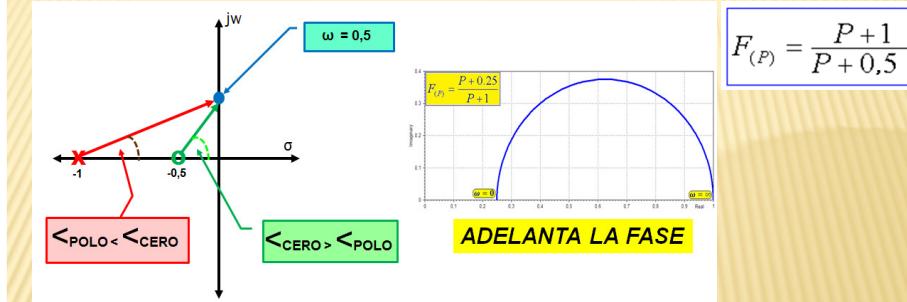
DETERMINAR EL VALOR DE LA $F(p)$ PARA $P \rightarrow 0$ Y $P \rightarrow \infty$



$$\omega \rightarrow 0 \quad F(P) = |2| \ 0^\circ$$

$$\omega \rightarrow \infty \quad F(P) = |1| \ 0^\circ$$

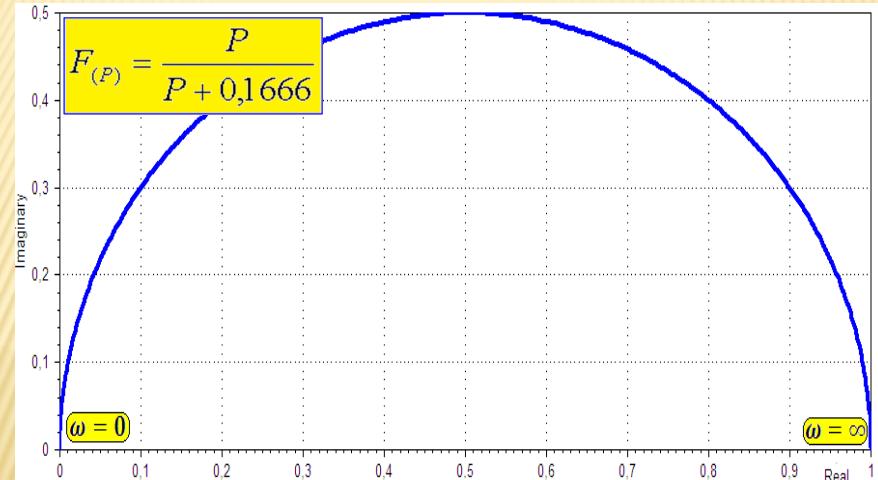
COMPARANDO LAS DOS FUNCIONES :



DETERMINAR EL VALOR DE LA $F(p)$ PARA $P \rightarrow 0$ Y $P \rightarrow \infty$

$$F_{(P)} = \frac{P}{P + 0,1666}$$

DETERMINAR EL VALOR DE LA $F(p)$ PARA $P \rightarrow 0$ Y $P \rightarrow \infty$



$$\begin{aligned} \omega \rightarrow 0 & \quad F(P) = |0| + 90^\circ \\ \omega \rightarrow \infty & \quad F(P) = |1| 0^\circ \end{aligned}$$

DETERMINAR EL VALOR DE LA $F(p)$ PARA $P \rightarrow 0$ Y $P \rightarrow \infty$

$$F_{(P)} = \frac{P^2}{P^2 + 2P + 0,25}$$

DETERMINAR EL VALOR DE LA $F(p)$ PARA $P \rightarrow 0$ Y $P \rightarrow \infty$

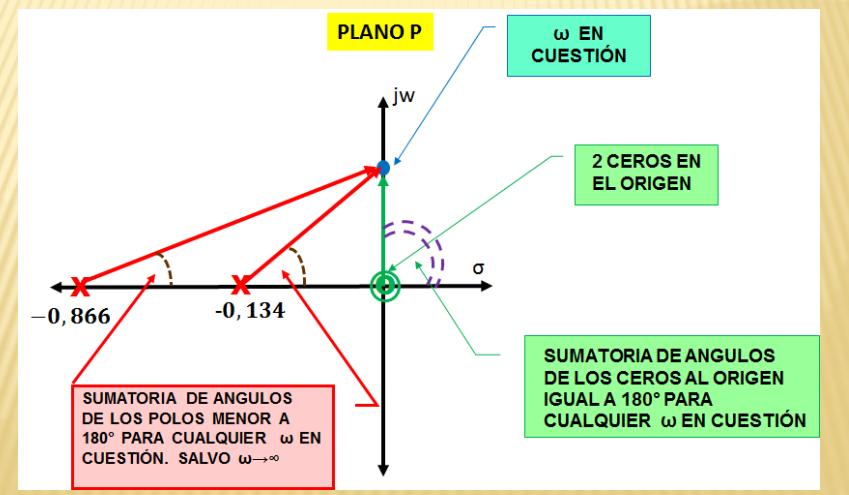
$$F_{(P)} = \frac{P^2}{P^2 + 2P + 0,25}$$

DETERMINAMOS LAS RAÍCES :

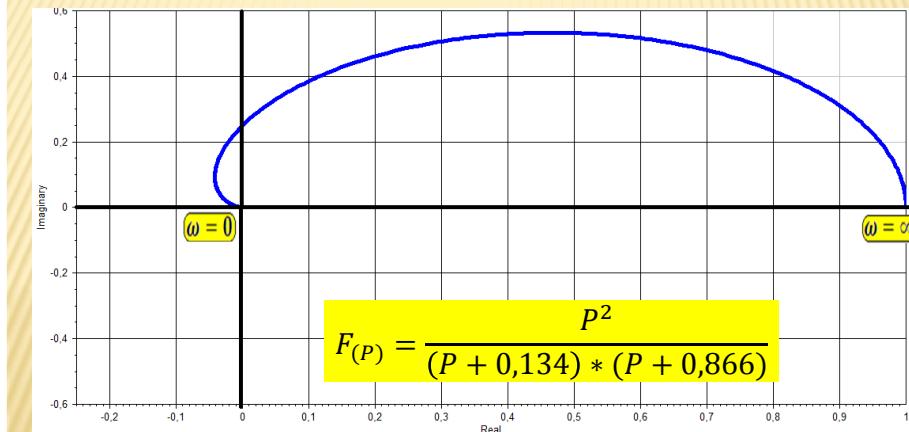
$$F_{(P)} = \frac{P^2}{(P + 0,134) * (P + 0,866)}$$

MEDIANTE MÉTODO GRÁFICO :

$$F(p) = \frac{P^2}{(P + 0,134) * (P + 0,866)}$$



DETERMINAR EL VALOR DE LA $F(p)$ PARA $P \rightarrow 0$ Y $P \rightarrow \infty$



$P \rightarrow 0 \quad F(p) = |0| + 180^\circ$
 $P \rightarrow \infty \quad F(p) = |1| \ 0^\circ$

FIN DE LA
PRESENTACIÓN !
GRACIAS !