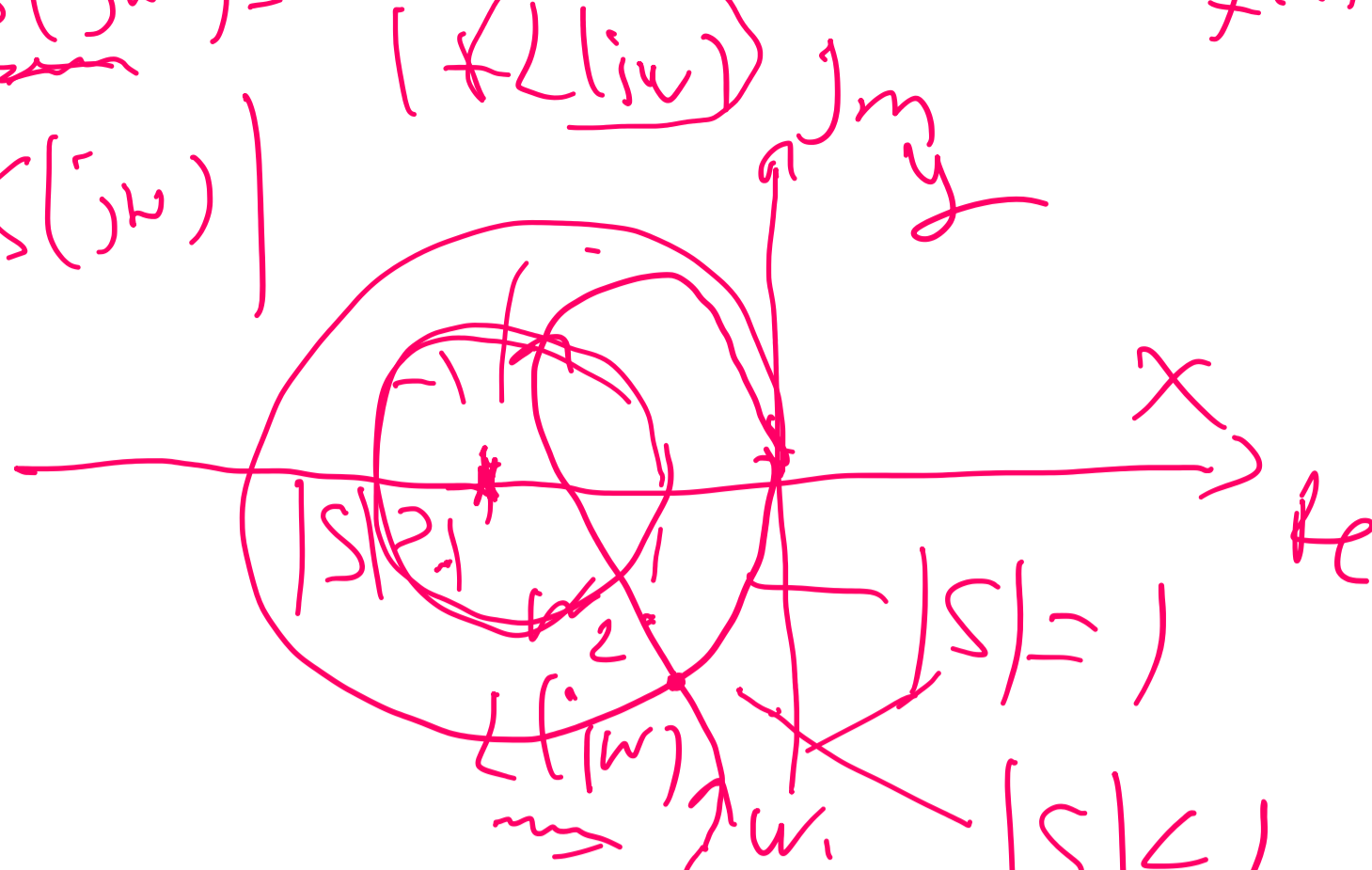


L, S, T
Magnitude Plot

$S(j\omega) = \frac{1}{1 + L(j\omega)}$

$|S(j\omega)|$

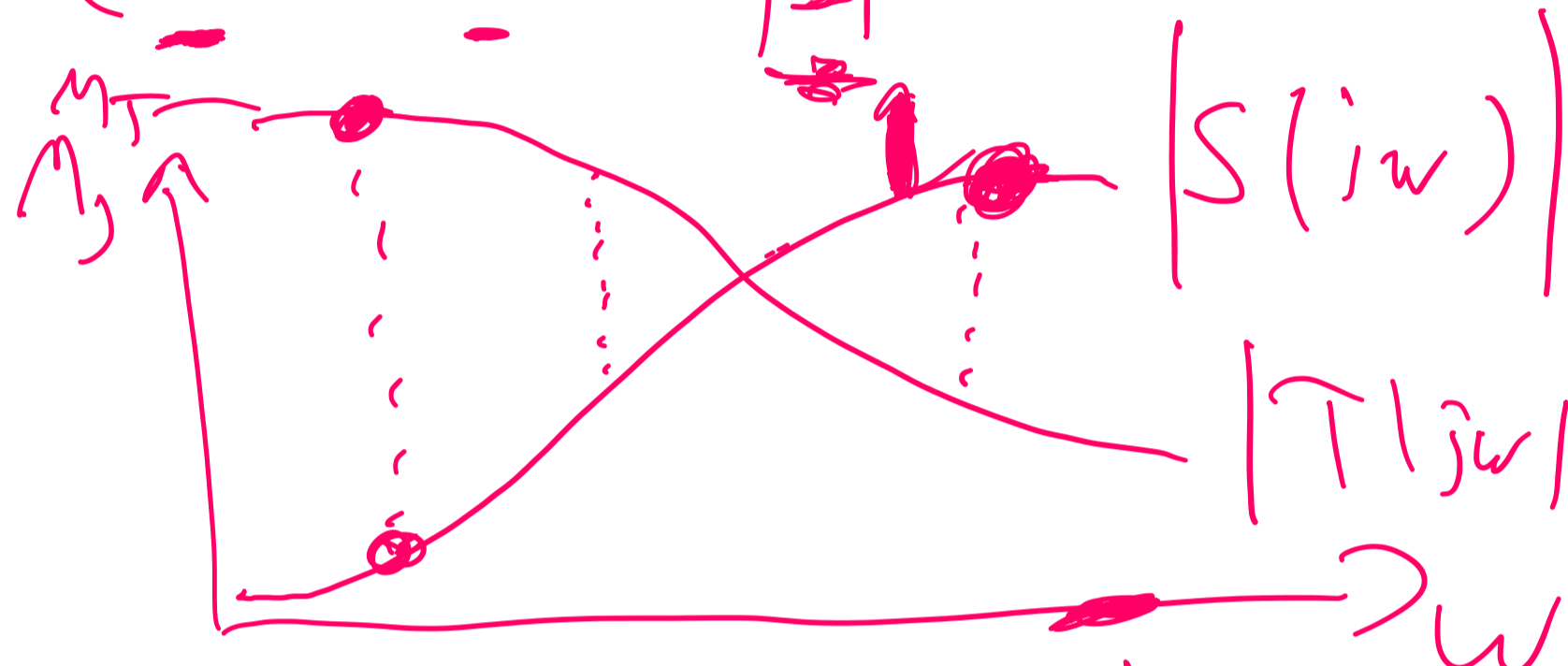


$L(j\omega) = x + iy$

$S = \frac{1}{1 + x + iy}, |S| = \frac{1}{\sqrt{(1+x)^2 + y^2}}$

$\sqrt{(1+x)^2 + y^2} = \frac{1}{|S|}$

$(1+x)^2 + y^2 = \frac{1}{|S|^2}$



$S(j\omega) + T(j\omega) = I$

~~$|S(j\omega)| + |T(j\omega)| = 1$~~

$|S(j\omega) - T(j\omega)| \leq |S(j\omega) + T(j\omega)| \leq |S| + |T|$

$M_S = \max_{\omega} |S(j\omega)|, (M_S - M_T)$

$M_T = \max_{\omega} |T(j\omega)| \leq 1$



$\{ = -F_y x - F_y b \}$

$\{ + F_y b \} = -F_y x$

$(I + F_y b) \{ = -F_y x$

$\{ = -(I + F_y b)^{-1} F_y x$