terça-feira, 16 de março de 2021 17:38

$$x(n) = b\,\delta(n+1) + a\,\delta(n) + b\,\delta(n-1)$$

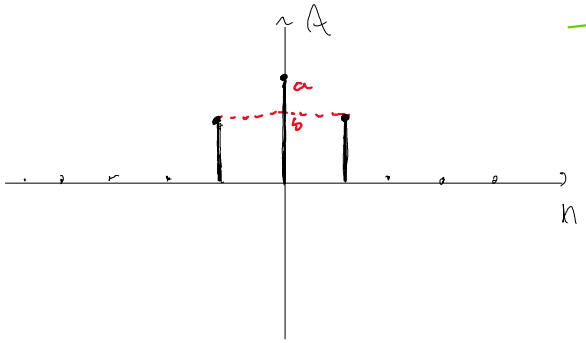
$$Z_T\{x(n)\} = bz + a + bz^{-1} = be^{jw} + a + be^{-jw} =$$

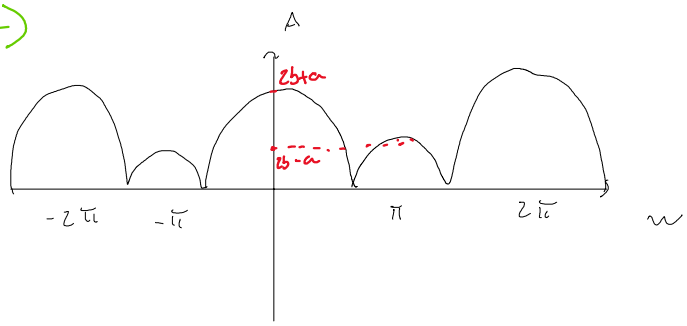
$$z = e^{jw}$$

$$= b\left(\cos(w) + j\,\text{sen}(w) + \cos(-w) + j\,\text{sen}(-w)\right) + a$$

$$= b\left(2\cos(w)\right) + a$$

TF →





módulo : $2b\cos w + a$

fase : $\emptyset$ rad/s

$Re\{X(w)\} = 2b\cos w + a$

$Im\{X(w)\} = \emptyset$