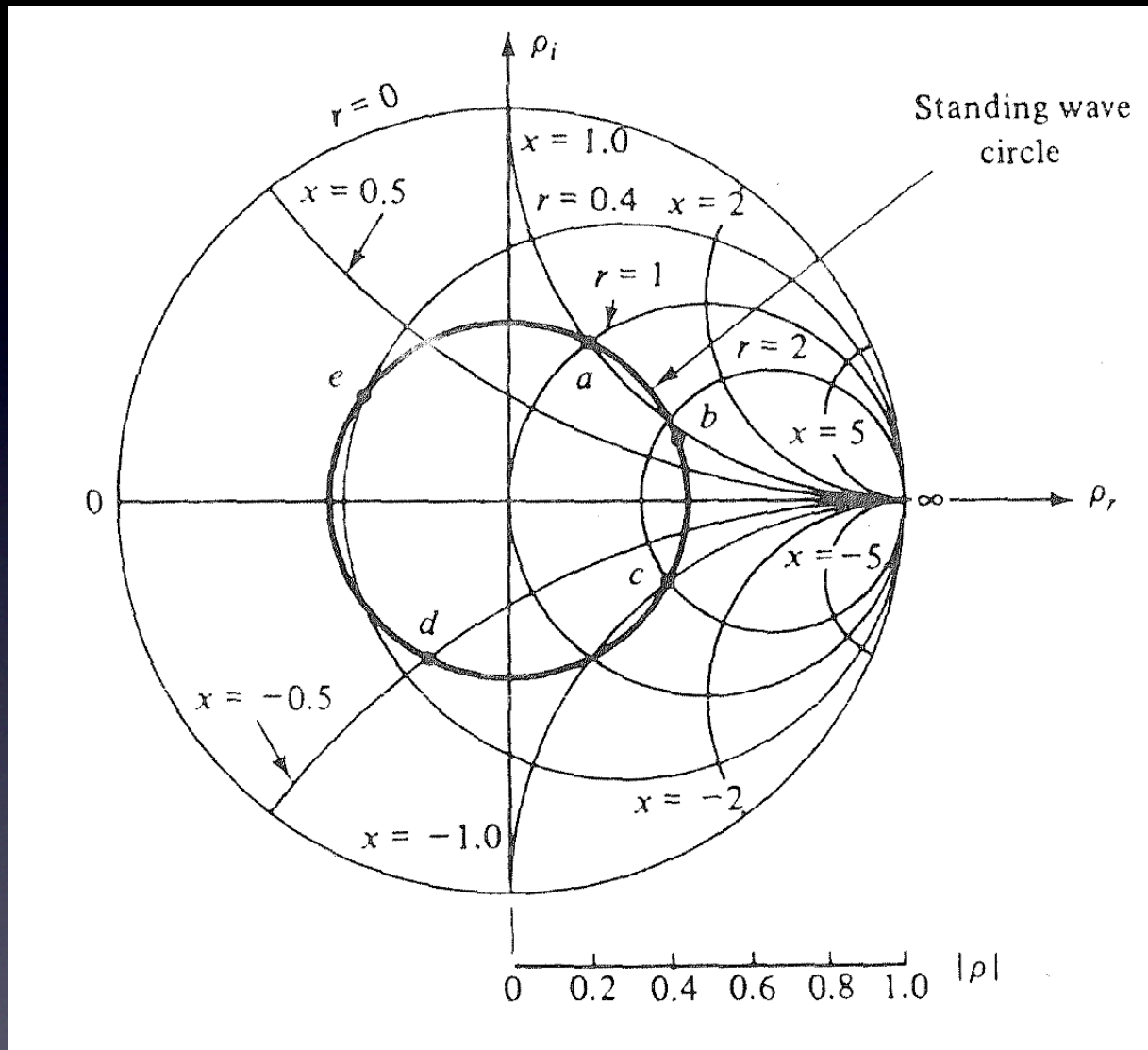


# SMITH : introduction



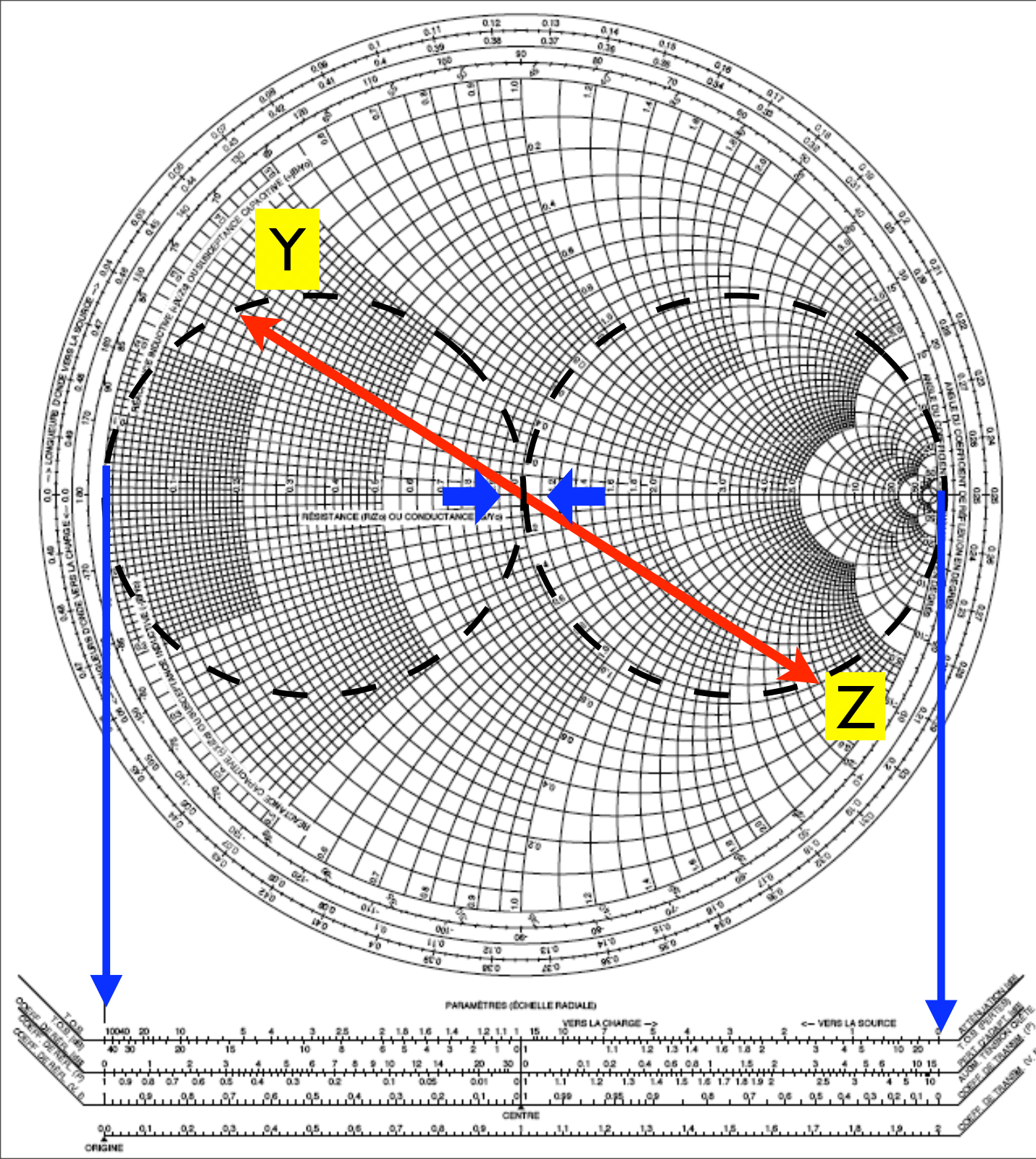
# TD 3 - Intro

$$\rho = \frac{z - 1}{z + 1}$$

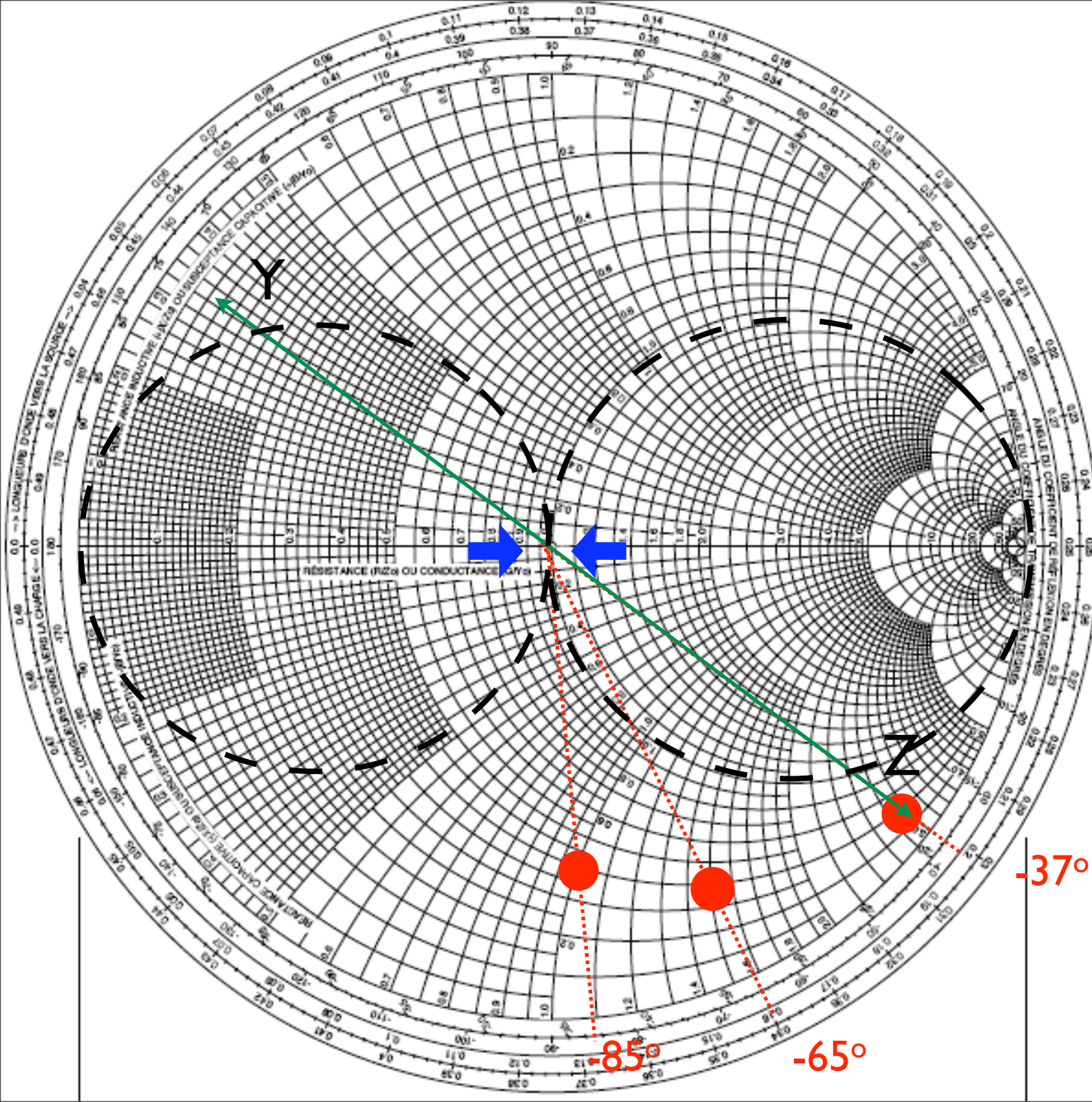
$$\rho(d + \frac{\lambda}{4}) = -\rho(d)$$

$$z(d + \frac{\lambda}{4}) = y(d)$$

$$\rho(z) = \rho(y) \cdot e^{j\pi}$$

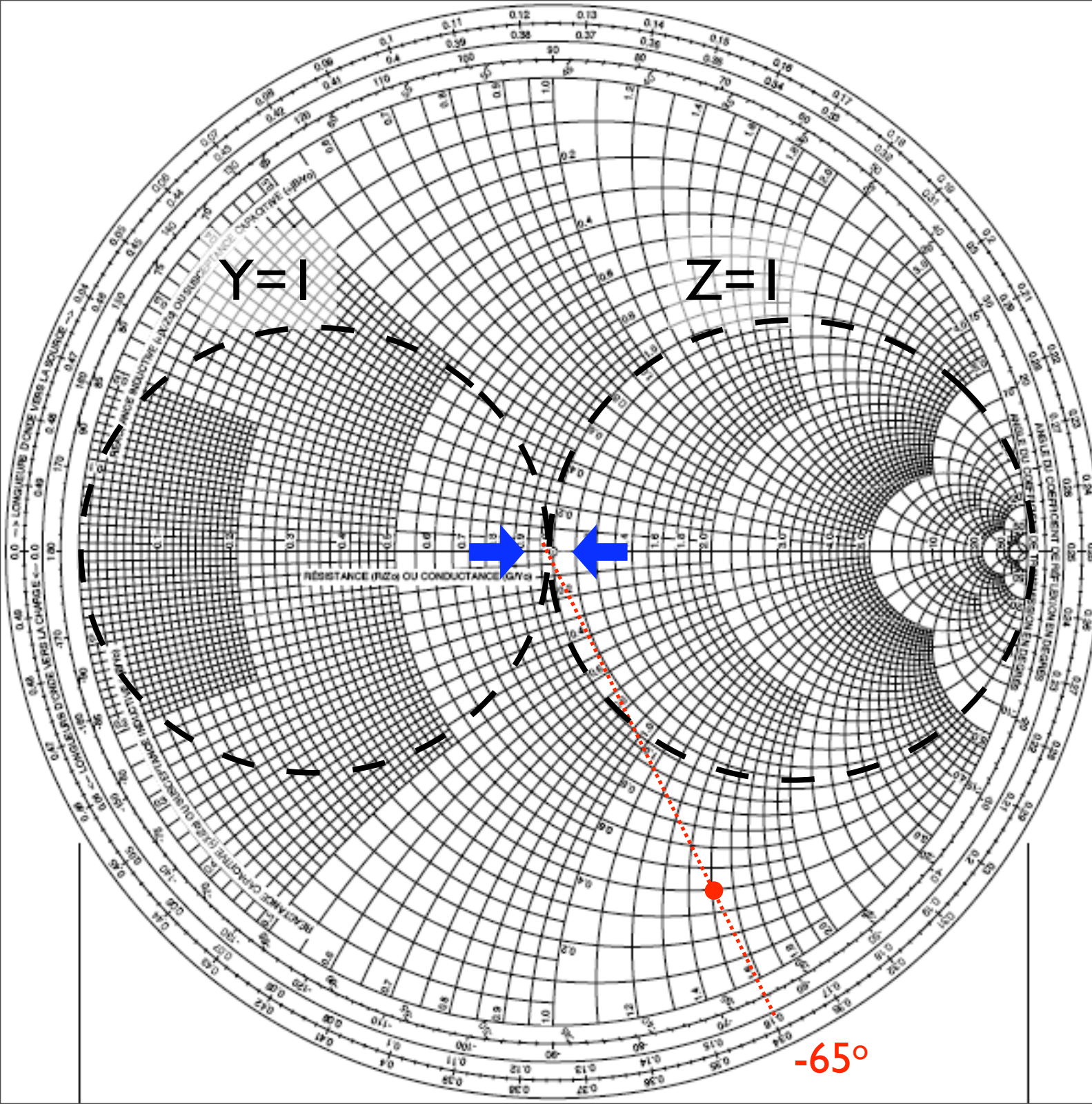


# TD 3 - Ex 1



$$\rho = \frac{z - 1}{z + 1}$$
$$\rho(d + \frac{\lambda}{4}) = -\rho(d)$$
$$z(d + \frac{\lambda}{4}) = y(d)$$
$$\rho(z) = \rho(y) \cdot e^{j\pi}$$

# TD 3 - Ex I



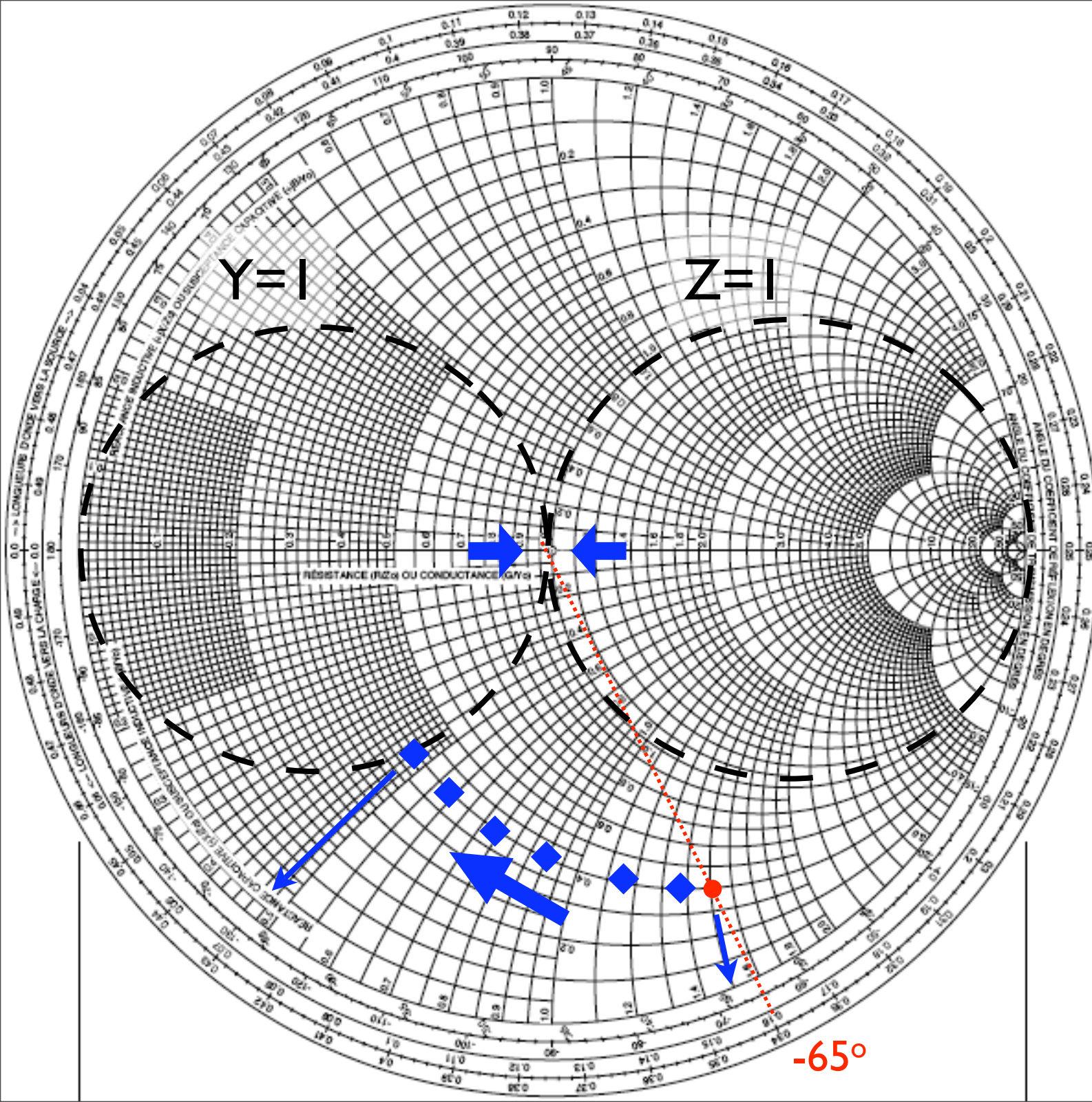
$$\rho = \frac{z - 1}{z + 1}$$

$$\rho(d + \frac{\lambda}{4}) = -\rho(d)$$

$$z(d + \frac{\lambda}{4}) = y(d)$$

$$\rho(z) = \rho(y) \cdot e^{j\pi}$$

# TD 3 - Ex I



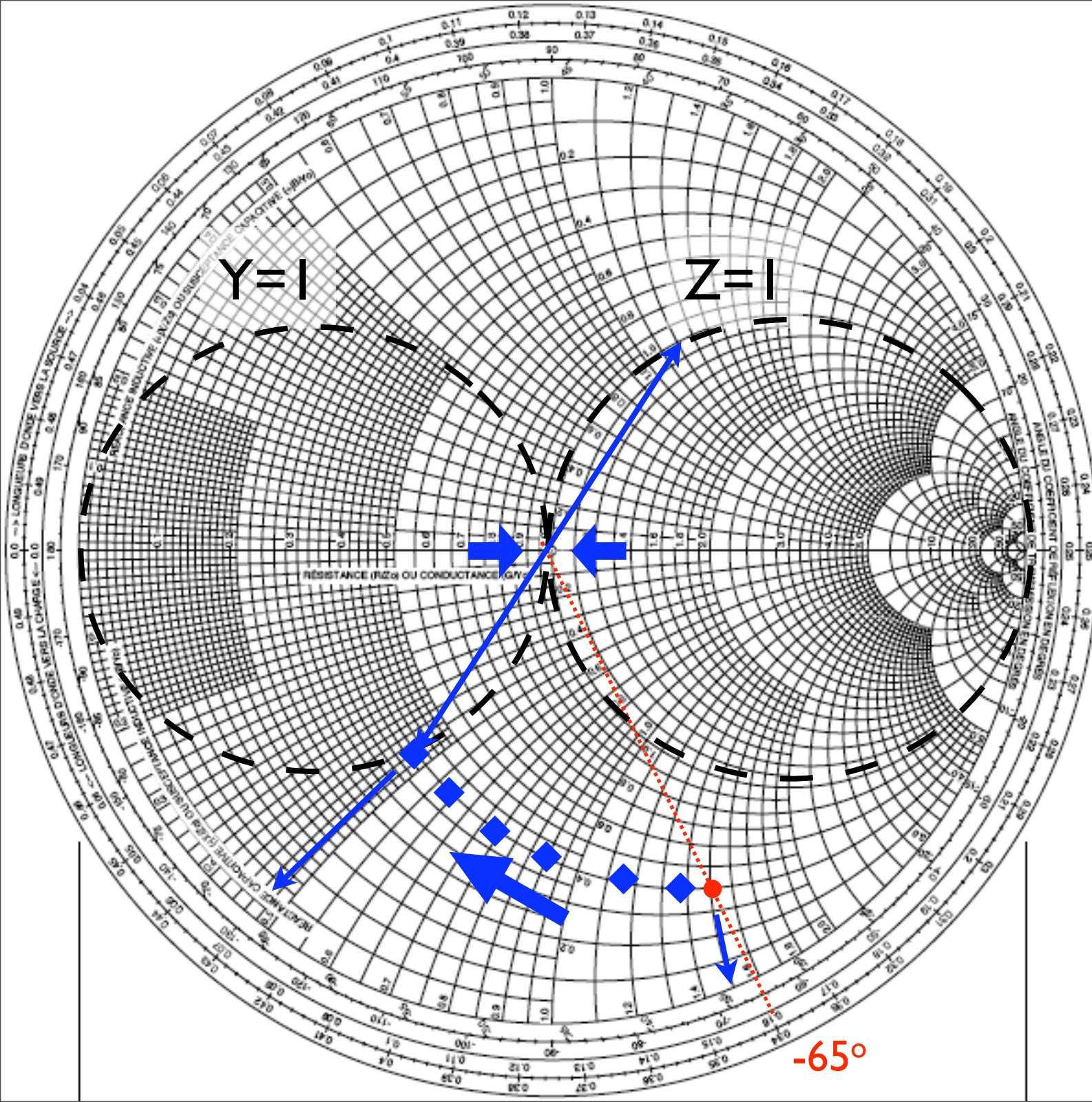
$$\rho = \frac{z - 1}{z + 1}$$

$$\rho(d + \frac{\lambda}{4}) = -\rho(d)$$

$$z(d + \frac{\lambda}{4}) = y(d)$$

$$\rho(z) = \rho(y) \cdot e^{j\pi}$$

# TD 3 - Ex I



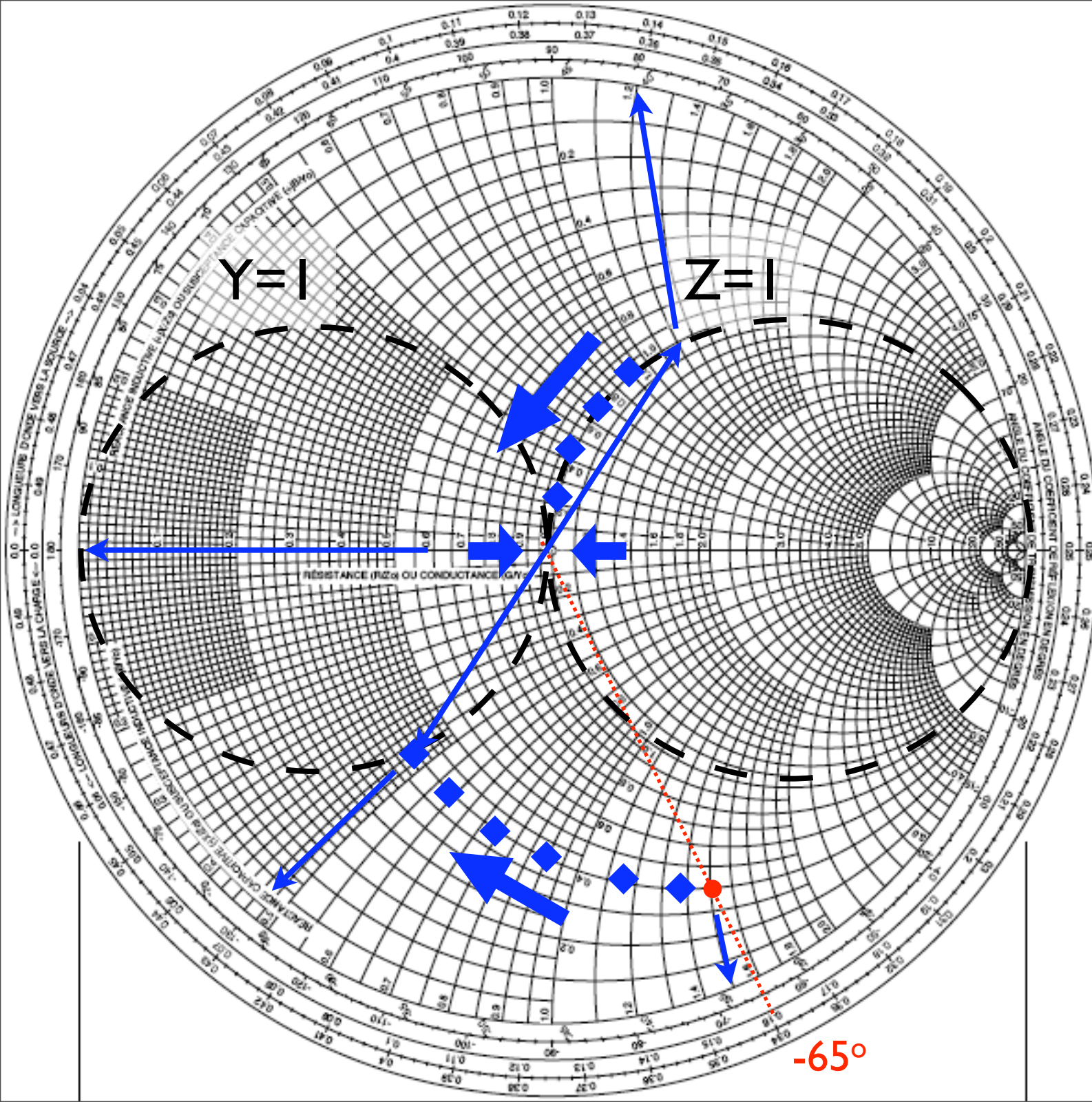
$$\rho = \frac{z - 1}{z + 1}$$

$$\rho(d + \frac{\lambda}{4}) = -\rho(d)$$

$$z(d + \frac{\lambda}{4}) = y(d)$$

$$\rho(z) = \rho(y) \cdot e^{j\pi}$$

# TD 3 - Ex I



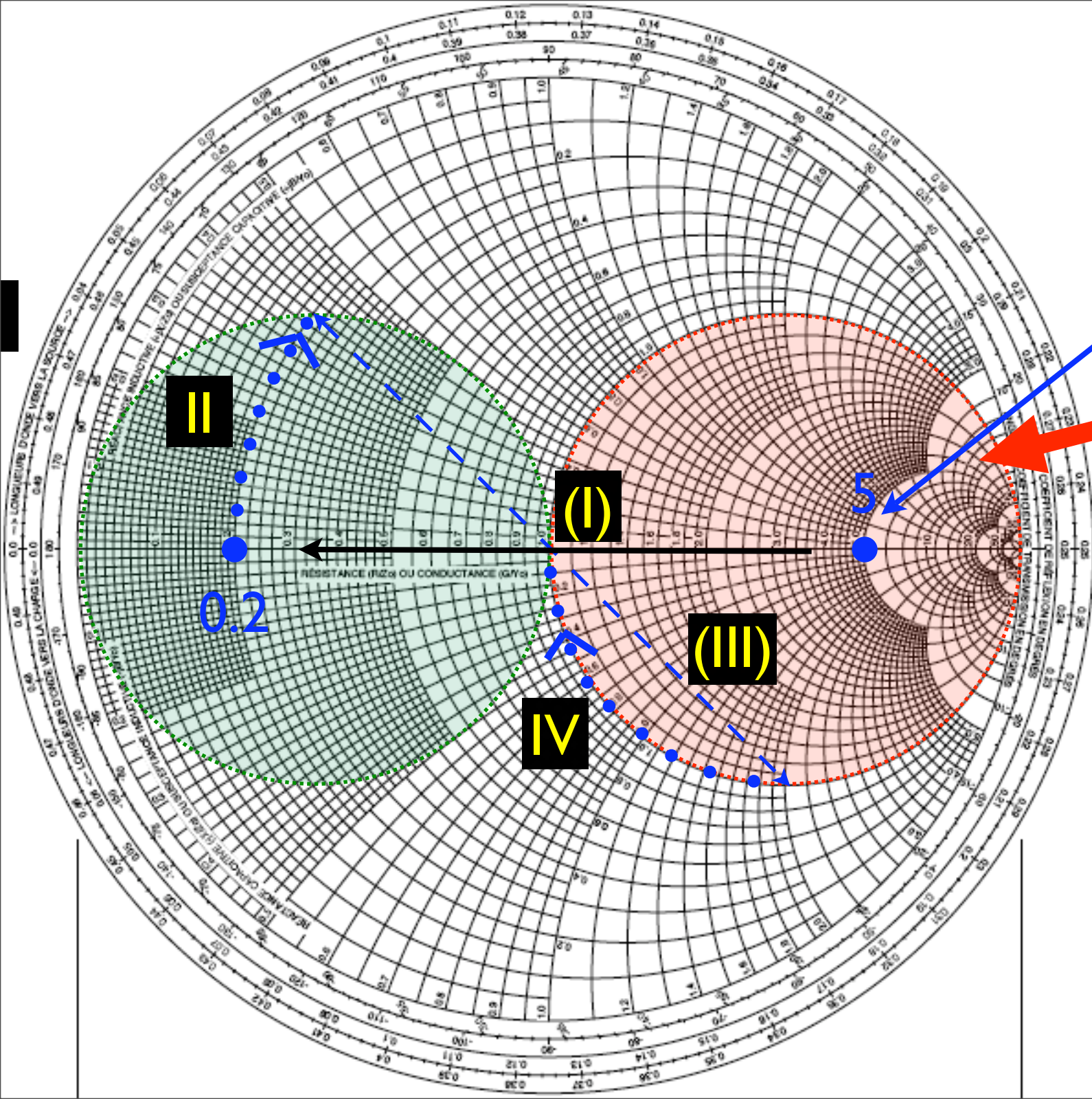
$$\rho = \frac{z - 1}{z + 1}$$

$$\rho(d + \frac{\lambda}{4}) = -\rho(d)$$

$$z(d + \frac{\lambda}{4}) = y(d)$$

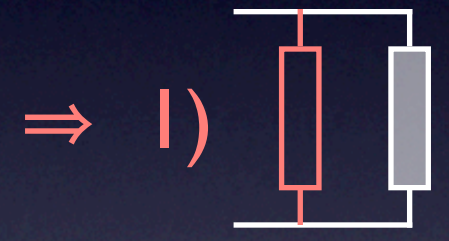
$$\rho(z) = \rho(y) \cdot e^{j\pi}$$

# Exemple (applet java)



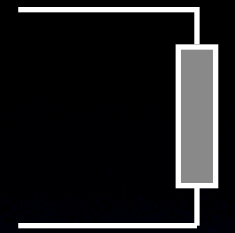
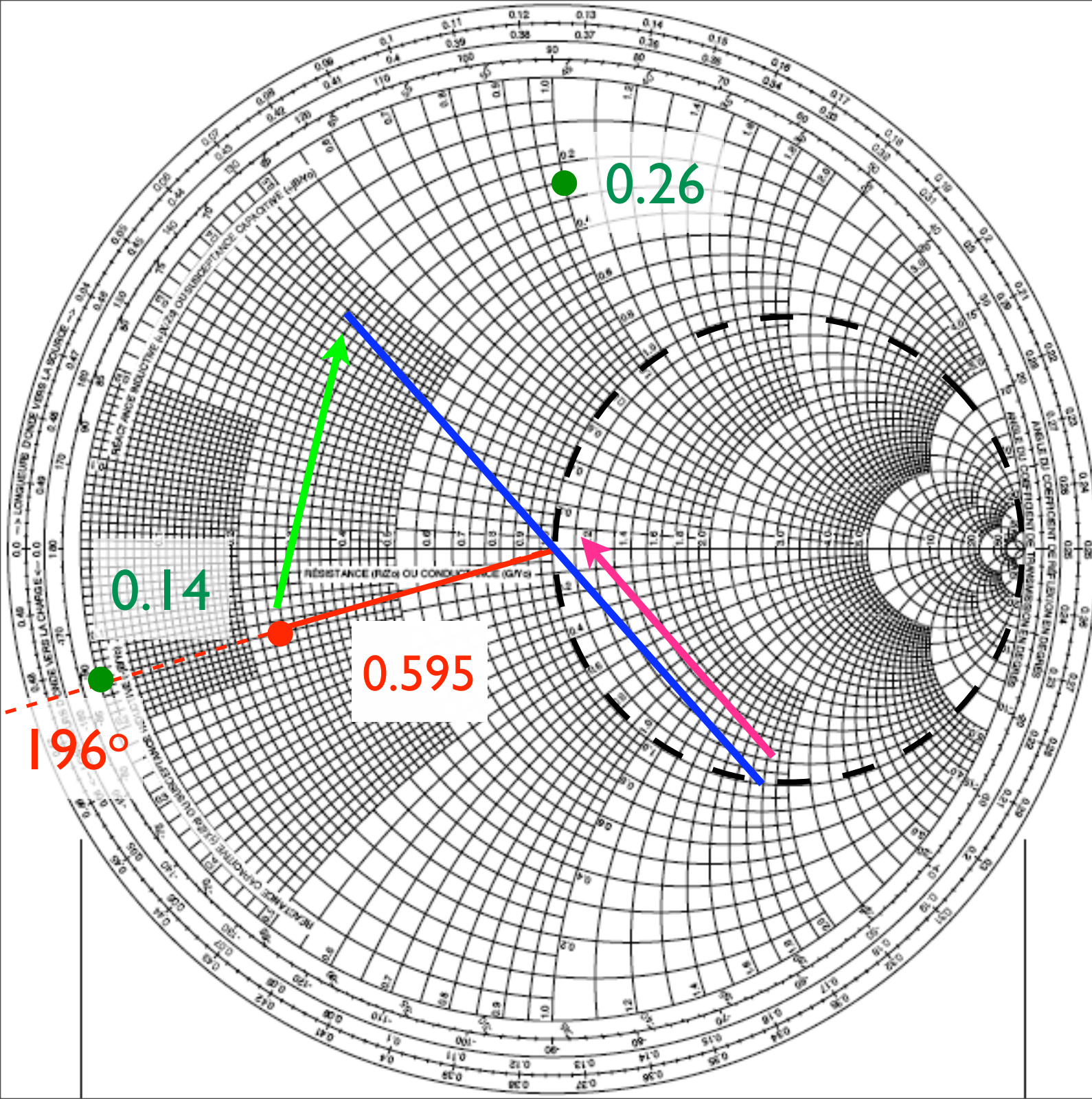
250  $\Omega$

intérieur du cercle  $z=1$

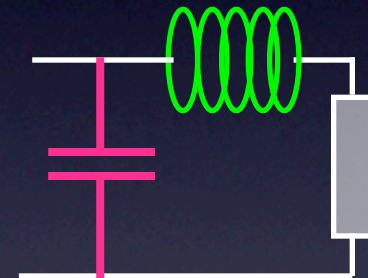




# TD 3 - Ex 2



$$z = 0.26 - 0.14j$$



[http://contact.tm.agilent.com/Agilent/tmo/an-95-1/  
classes/imatch\\_popup.html](http://contact.tm.agilent.com/Agilent/tmo/an-95-1/classes/imatch_popup.html)

1.6

