Notation of θ in Cryer and R.

Cryer :

$$\Phi(B) Y_t = \Theta(B) e_t$$

$$\Phi(x) = 1 - \phi_1 x - \phi_2 x^2 - \cdots - \phi_p x^p$$

$$\Theta(x) = 1 - \theta_1 x - \theta_1 x^2 - \cdots - \theta_q x^q$$

R :

$$\Phi(B) Y_t = \Theta(B) e_t$$

$$\Phi(x) = 1 - \phi_1 x - \cdots - \phi_p x^p$$

$$\Theta(x) = 1 + \theta_1 x + \cdots + \theta_q x^q \quad \leftarrow \text{sign is different.}$$