Step 1: Generate White Noise ε_t
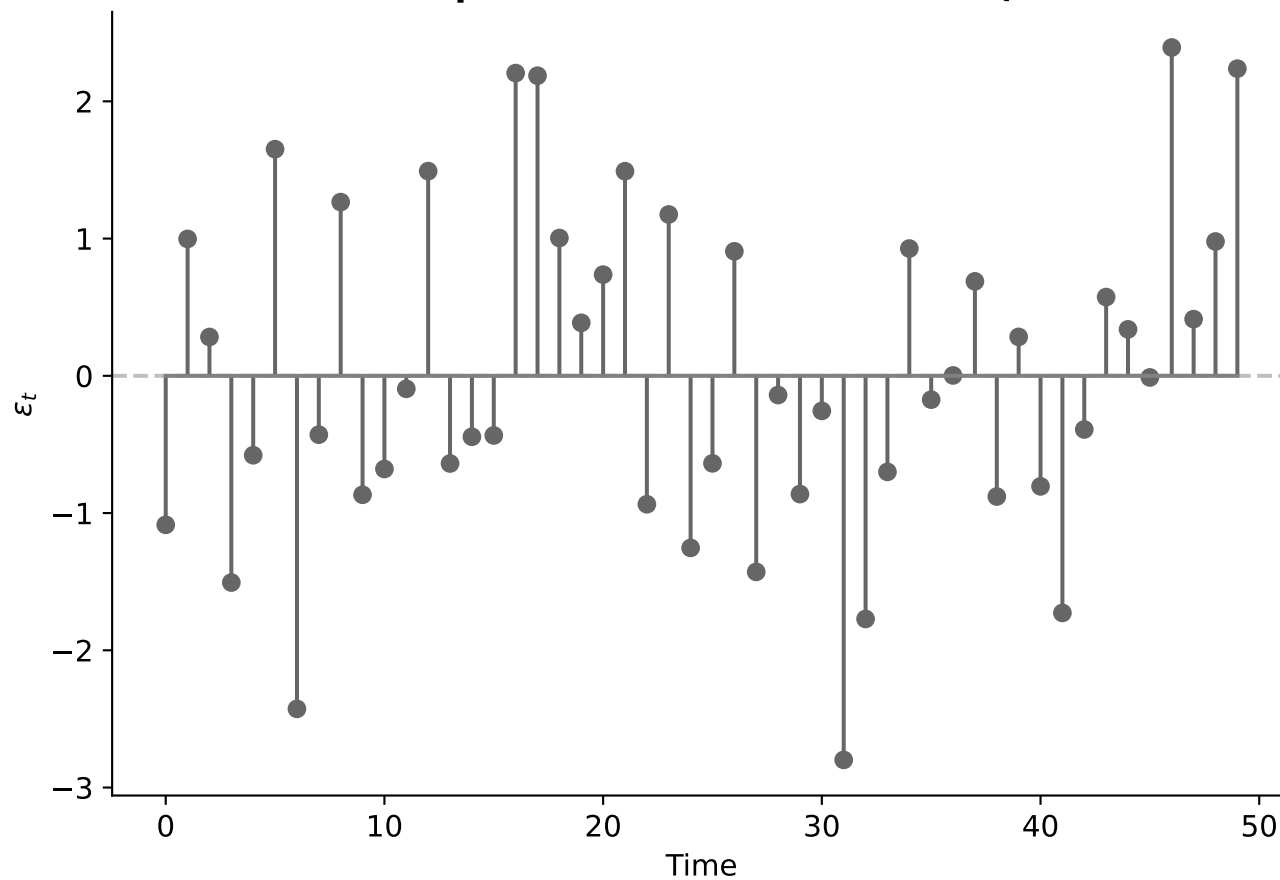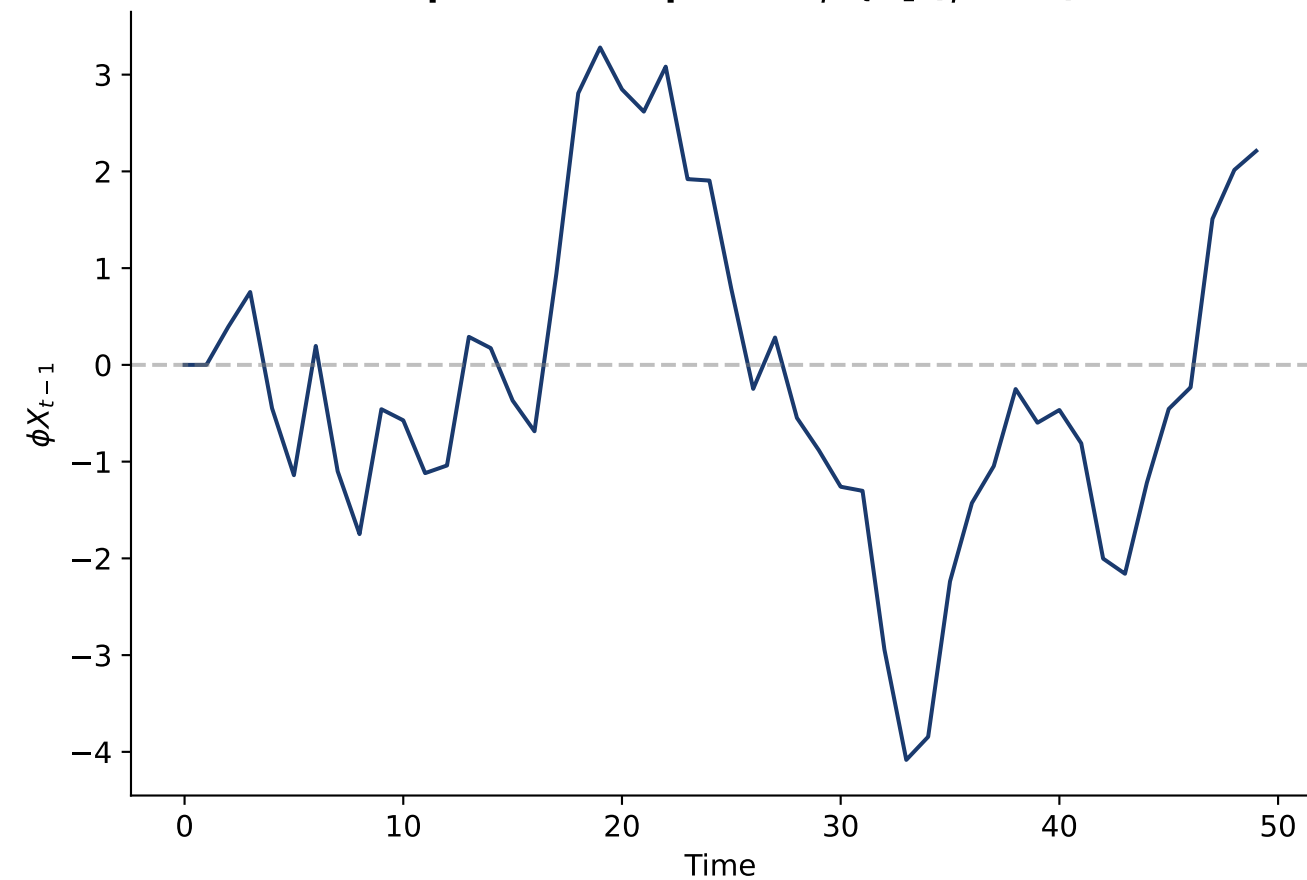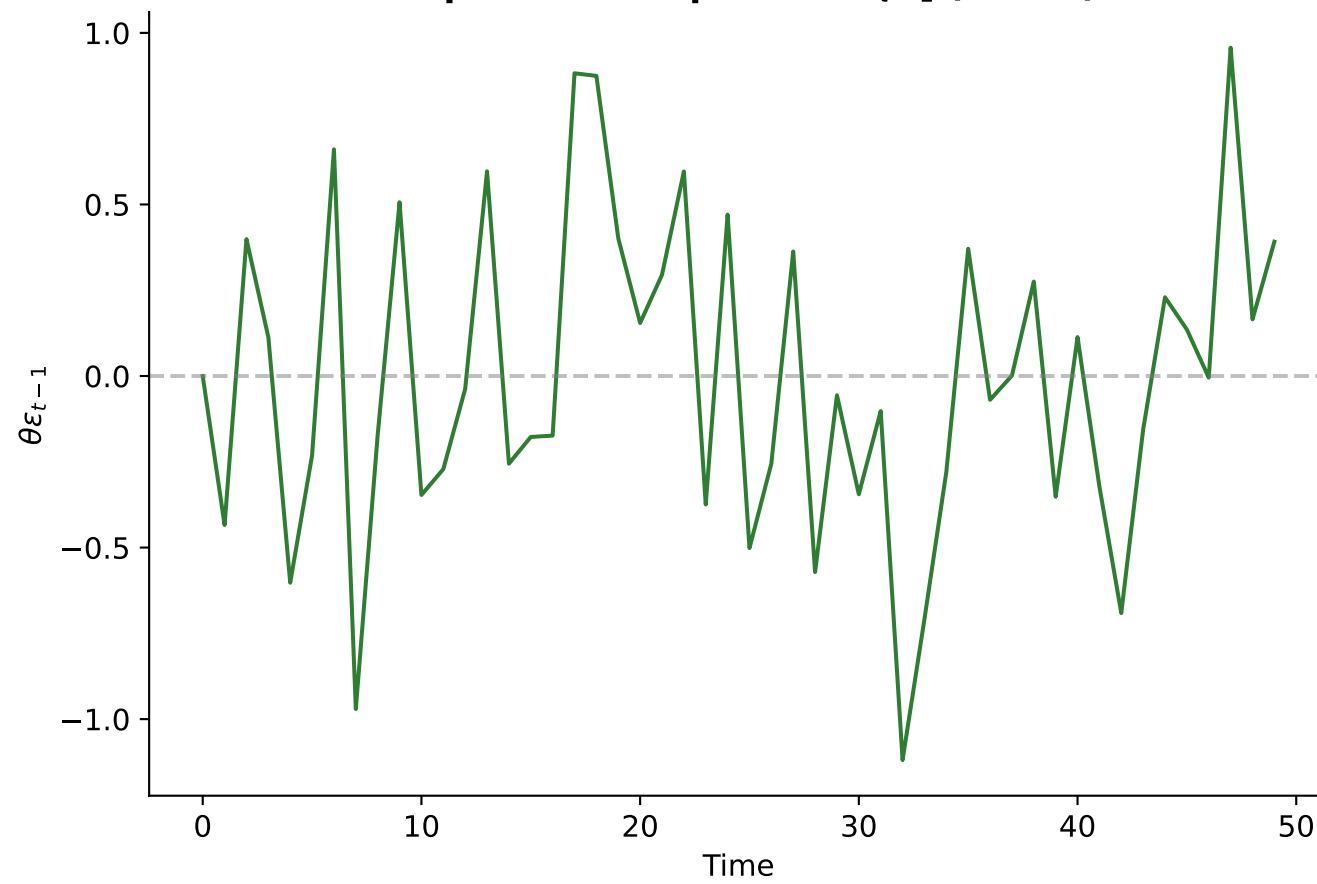
Step 2: AR Component ϕX_{t-1} ($\phi = 0.7$)

Step 3: MA Component $\theta \varepsilon_{t-1}$ ($\theta = 0.4$)

Step 4: ARMA(1,1) = AR + MA + ε_t

$X_t = \phi X_{t-1} + \varepsilon_t + \theta \varepsilon_{t-1}$