K = 1 (One Harmonic)
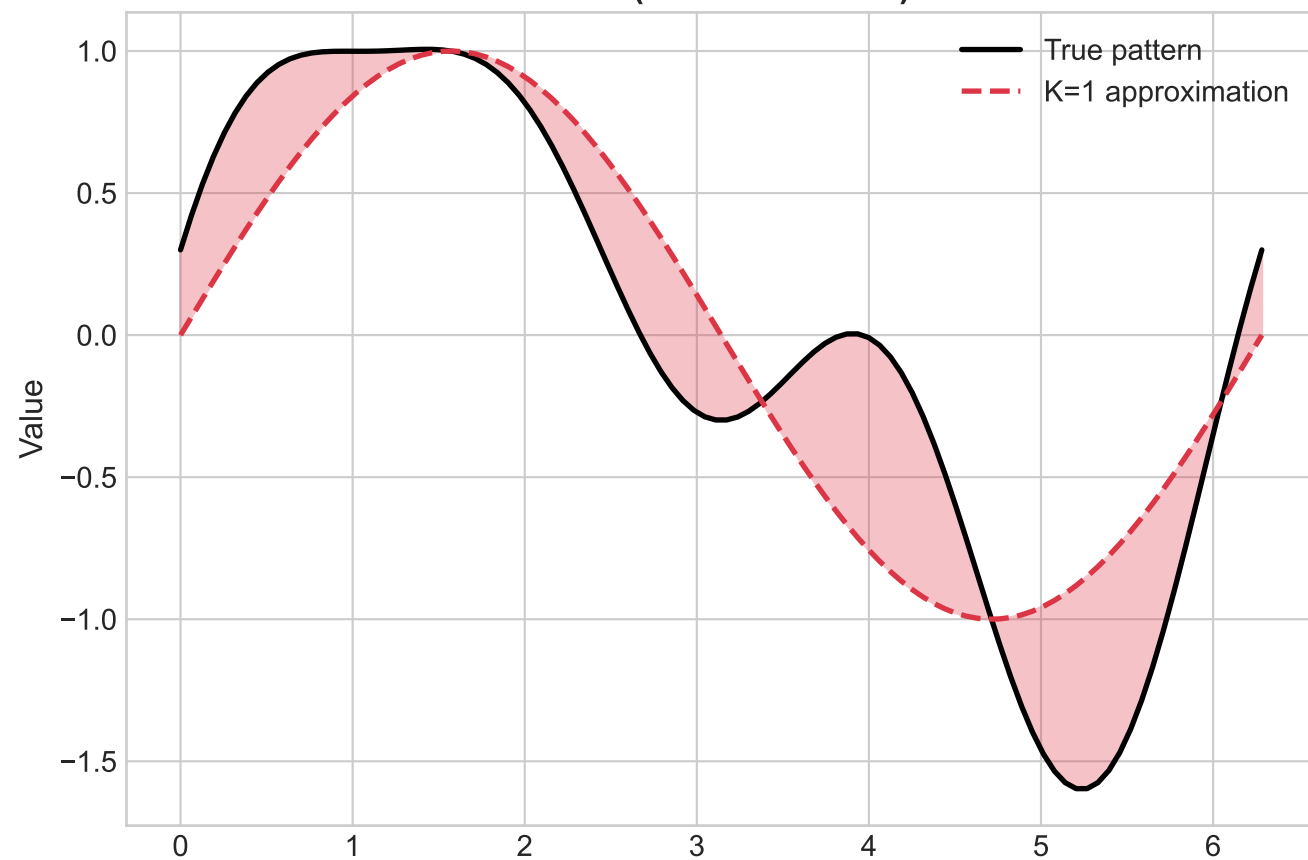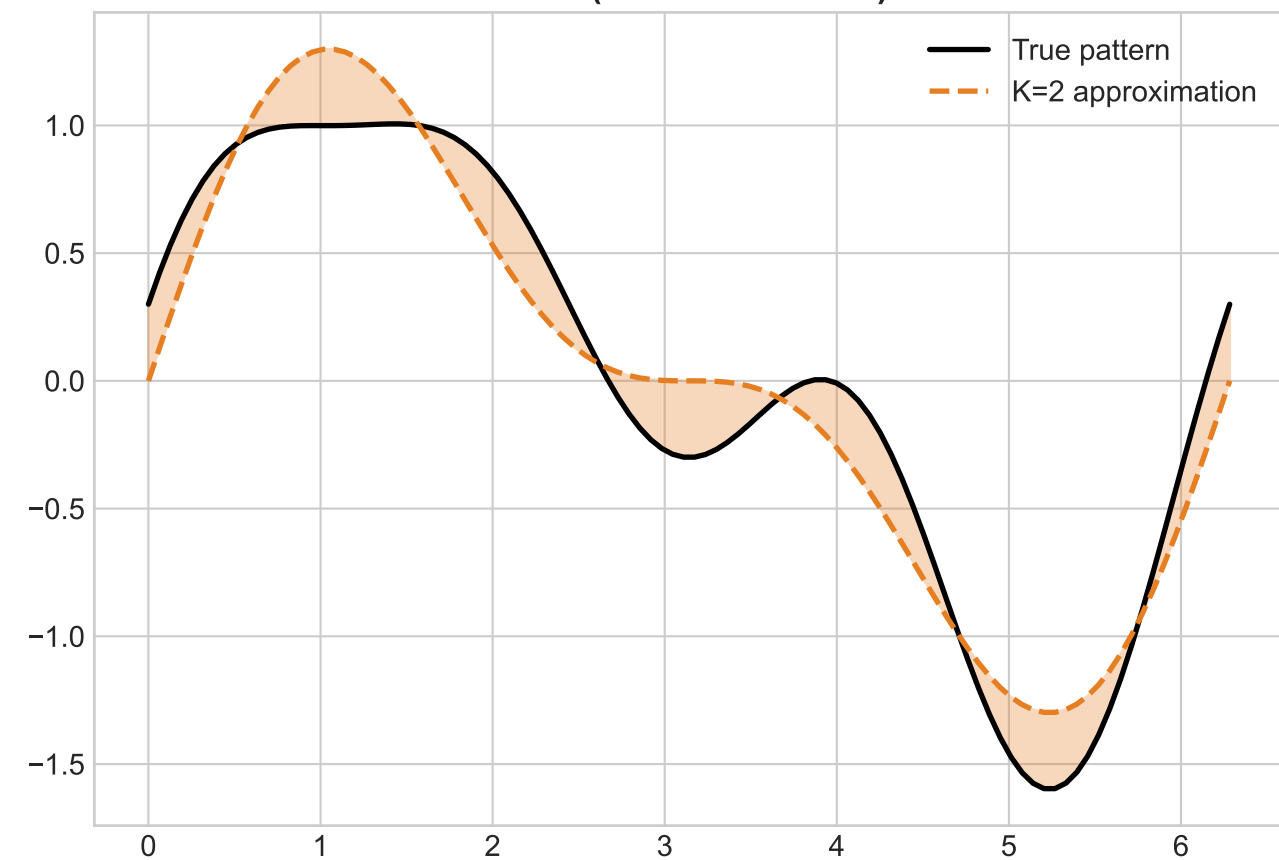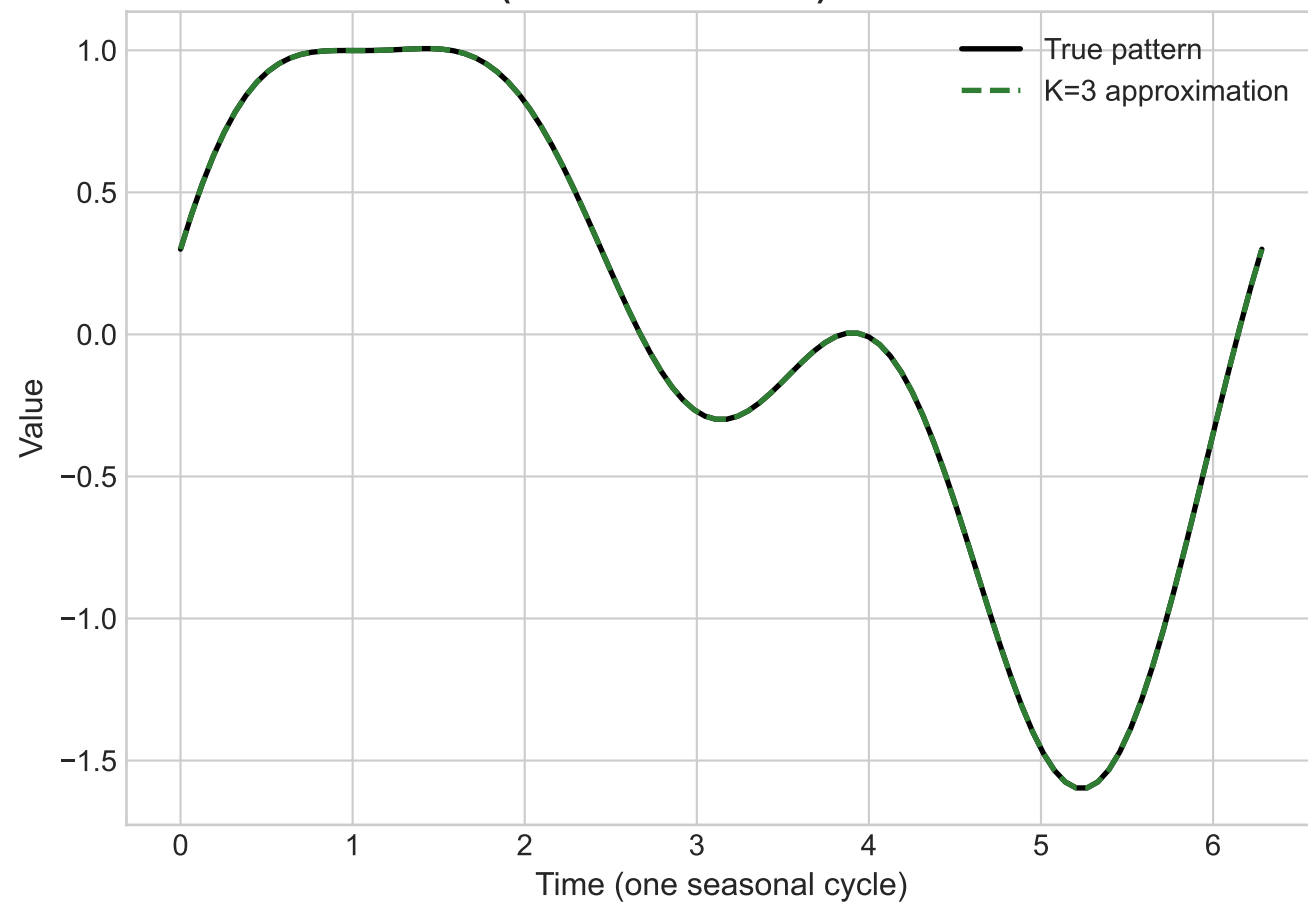
K = 2 (Two Harmonics)

K = 3 (Three Harmonics) - Perfect Fit

Approximation Error vs K