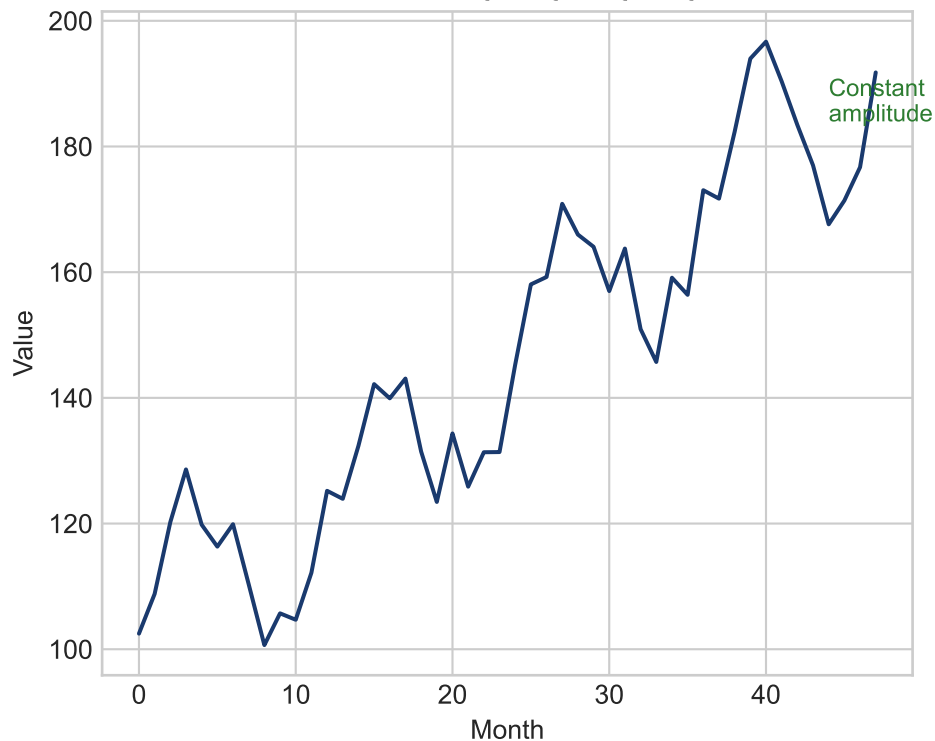
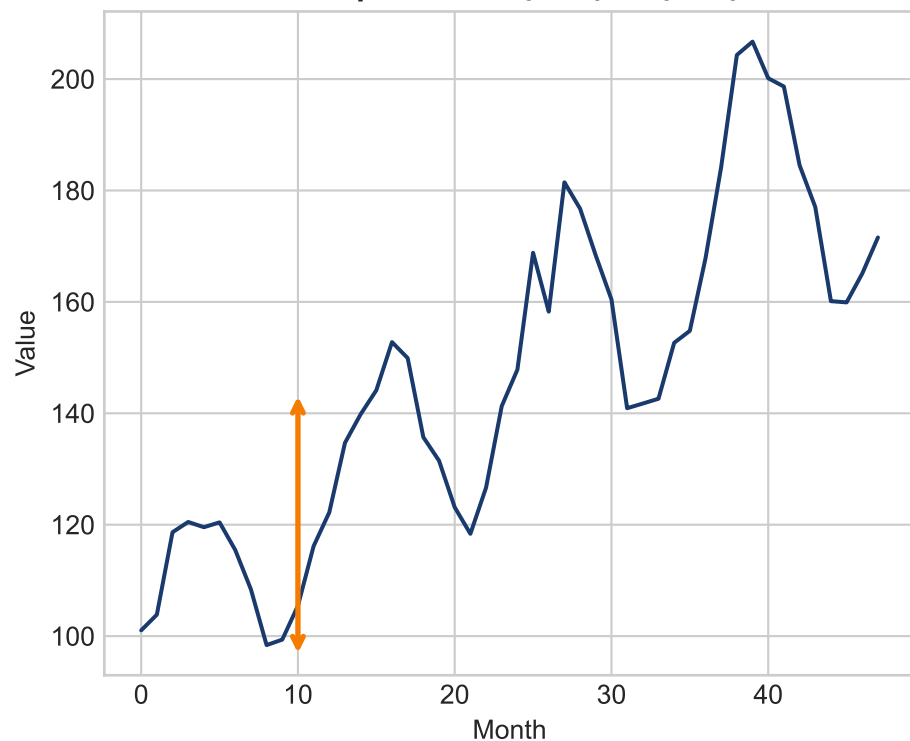


Additive: $Y_t = T_t + S_t + \varepsilon_t$



Multiplicative: $Y_t = T_t \times S_t \times \varepsilon_t$



When to use which?

ADDITIVE

Seasonal amplitude
is **CONSTANT**

Variance stable

MULTIPLICATIVE

Seasonal amplitude
GROWS with level

Use log transform!

Visual Diagnostic

Additive
(parallel)

Multiplicative
(fan shape)