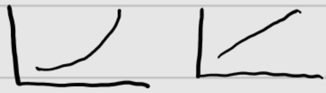
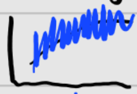
1

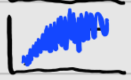
Classical time series info

There are 4 components to time series:

a) Trend  → General LR Δ in data (may or may not be linear)

b) Seasonal (< 1 year)

↳ additive  → Fluctuations are constant

↳ multiplicative  → Fluctuations proportionate to level

c) cyclical

↳ Quasi regular fluctuations around some LT trend > 1 year

d) Random (i.e. everything unexplainable

How to identify components?

↳ Smoothing:
↓
Random is removed by smoothing

↳ Decomposition
↓
TS broken into components of systemic parts