Computation and Visualization for Analytics

Spring 2021
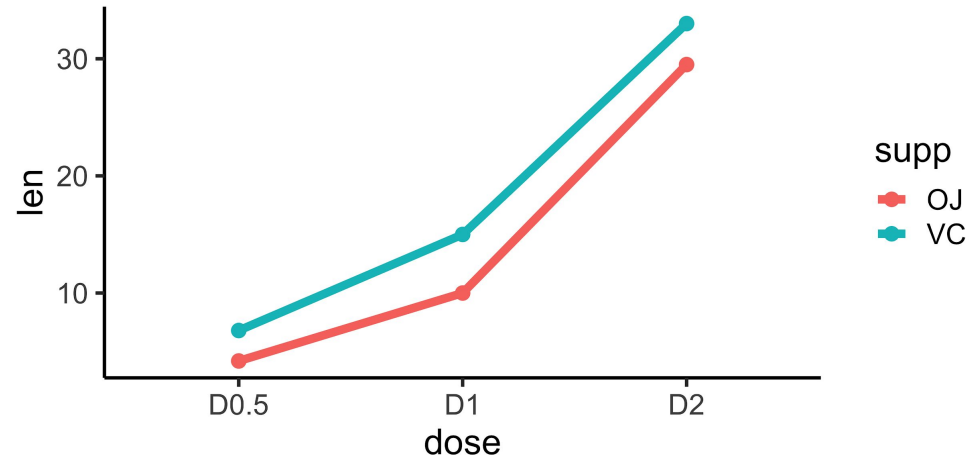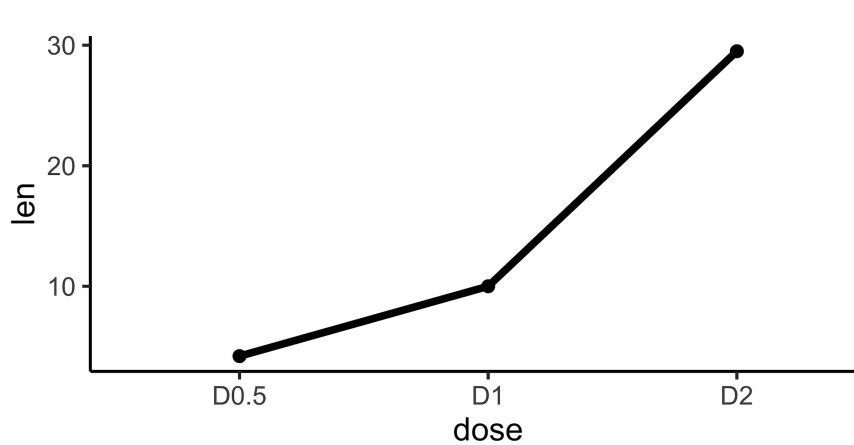
Week 7.1

Visualizing Trends

- Line Plots
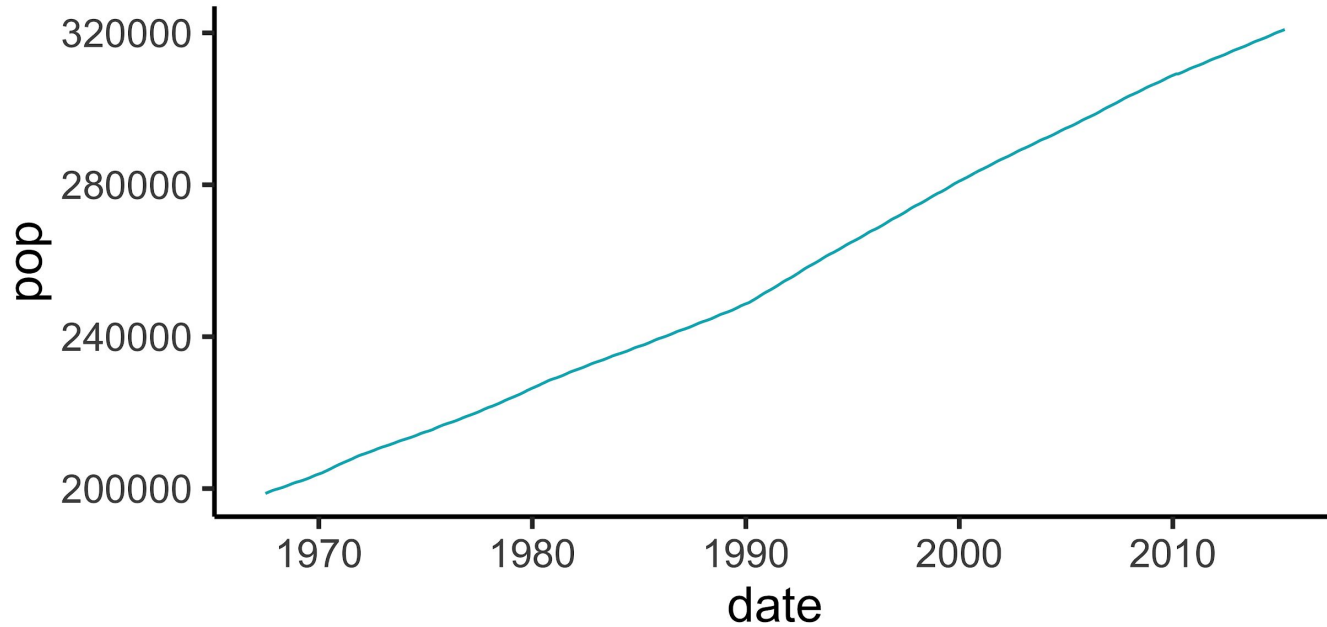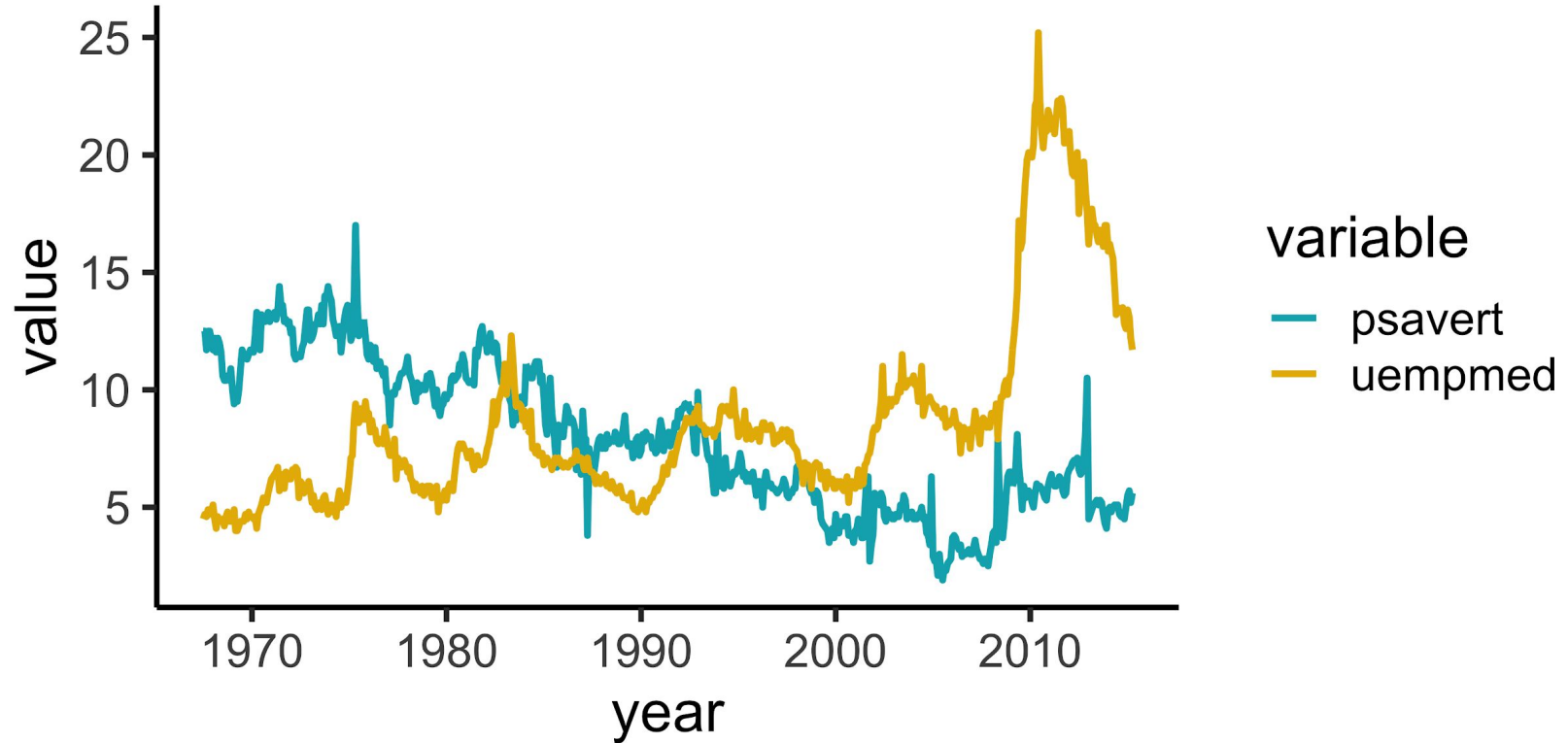- Time Series

Line Plots

- One (or two) categorical and one numerical axis
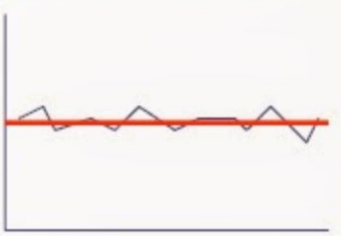
Line Plots

- Both axis can be continuous

Line Plots -Time Series

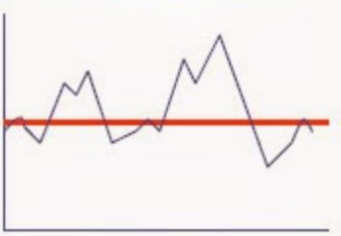# Visual Components of a Time Series

- Trend
- Seasonal
- Cyclical

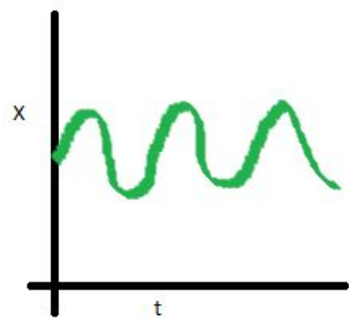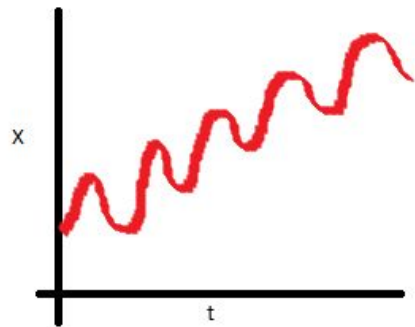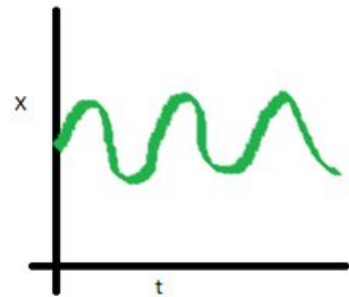# Classification of Time Series Patterns

	No Seasonal Effect	Additive Seasonal Effect	Multiplicative Seasonal Effect
No Trend Effect			
Additive Trend Effect			
Multiplicative Trend Effect			

[Pegels 1969 / Gardner]
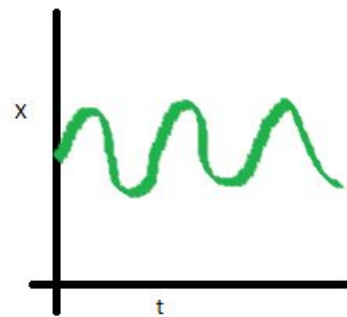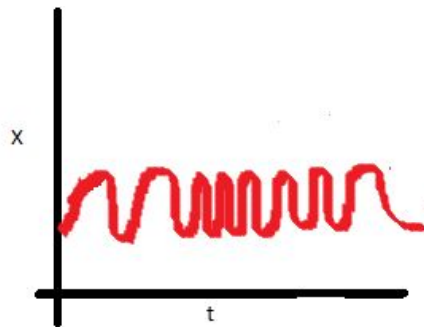
Stationary series

Non-Stationary series

Stationary series

Non-Stationary series

Stationary series

Non-Stationary series