

# Cheat sheet

## SARIMAX

### ARIMA

A Forecasting Model consisting of 3 components: AutoRegressive, Integrated, and Moving Average

### AutoRegressive

The Autoregressive model uses the previous observations to model the predictions.

### Integrated

The number of times differencing is done to achieved stationarity

### Differencing

Subtracting immediate observations. For instance, subtract  $y_t$  by  $y_{t-1}$ .

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### Stationarity

A stationary Time Series has a constant Mean, Variance and Co-Variance over time.

### SARIMA

Seasonal ARIMA. The adaptation of ARIMA to seasonal data.

### SARIMAX

Seasonal ARIMA with Exogenous Regressors.

### Exogenous Regressors

Similar to Independent Variables. Used to help explain the Time-Series. Caution: if used to explain the past, they need to be used to explain the future.