Week 4 - Check Your Understanding

1. Longitudinal data are data ordered by time while cross-sectional data are not.

* \*a. True
  1. False

1. A time series can usually be decomposed into two components: Time trend component and and seasonal component.
   1. True \*b. False
2. Time series regression is to model as a polynomial function of the time and an error.

* \*a. True
  1. False

1. A white-noise can be considered as an identically independently distributed from a specific distribution

* \*a. True
  1. False

1. A stationary time series has the mean function change over time
   1. True \*b. False
2. A stationary time series has a constant variance over time.

* \*a. True
  1. False

1. A white noise is a stationary time series.

* \*a. True
  1. False

1. A random walk is always non-stationary.
   1. True \*b. False
2. In simple moving average, the smaller the value , the smoother the averages.
   1. True \*b. False
3. Autoregression models of level 1, AR(1), includes both white-noise process and random walk process.

* \*a. True
  1. False