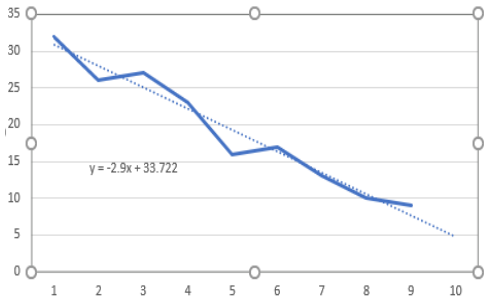
Week 1
Term 3
2019

HAWKER COLLEGE
Engage | Inspire | Achieve

Learning Brief

MA4

Goals



By the end of this unit students should:

- understand the concepts and techniques in time series analysis; loans, investments and annuities; and networks and decision mathematics
- apply reasoning skills and solve practical problems
- communicate their arguments and strategies
- interpret mathematical and statistical information
- choose and use technology appropriately and efficiently.

This week:

- graphing over time
- fitting trend lines and forecasting

Theoretical Components

Resources:
For this week the theory work is in the *PDF file:* Week 1 Notes & Exercises.

Finding the linear regression equation using google sheets.

https://www.youtube.com/watch?v=vMfVOUv0HMg

An interesting exercise in using a trend line.

https://www.khanacademy.org/math/probability/scatterplots-a1/estimating-trend-lines/v/smoking-1945-extrapolation

Knowledge Checklist

- Time series
- Trends
- Secular, seasonal, cyclic, random
- Outliers
- Cycles
- Trend line
- Forecasting
- Linear regression equation

Practical Components

There are questions to be answered in the booklet *Week 1 Notes & Exercises*

Investigation

This week's booklet is the Investigation. Setting out of solutions will be one criteria, spreadsheet printouts will be another.

On-line Quiz

On Mathspace