Week 4
Term 1
2020

HAWKER COLLEGE
Engage | Inspire | Achieve

Learning Brief

MA3

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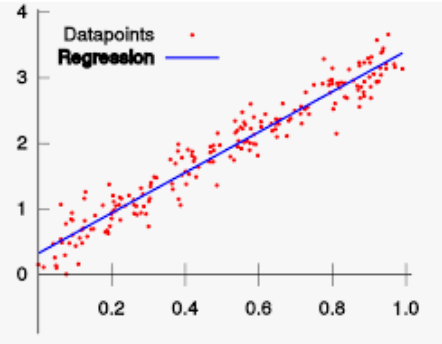
Goals



This week:

- model a linear relationship by fitting a least-squares line to the data
- use a residual plot to assess the appropriateness of fitting a linear model to the data
- interpret the intercept and slope of the fitted line
- use the equation of a fitted line to make predictions
- distinguish between interpolation and extrapolation when using the fitted line to make predictions, recognising the potential dangers of extrapolation
- write up the results of the above analysis in a systematic and concise matter

Theoretical Components

Resources:
For this week the theory work is in the *PDF file:* Week *4* Notes & Exercises

Line of best fit

https://www.youtube.com/watch?v=DmGLQkUm-4g

Interpolation and extrapolation

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

Knowledge Checklist

- Fitting straight lines to bivariate data
- Balancing points
- Equation of a straight line
- Least squares regression
- Dependent and independent variable
- Interpolation
- Extrapolation

Practical Components

There are questions to be answered in the booklet *Week 4 Notes & Exercises*

Investigation

On HawkerMaths and attached to this week's work

On-line Quiz

Mathspace Task