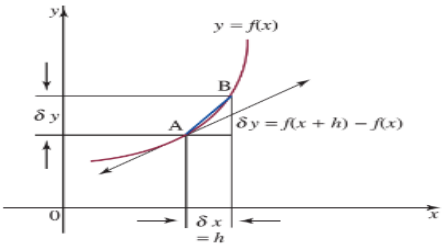
Week 7/8
Term 1
2019

HAWKER COLLEGE
Engage | Inspire | Achieve

Learning brief MM3:
Further differentiation and applications

Goals



By the end of this week, you should be able to:

- Use the increments formula: $\delta y \cong \frac{dy}{dx} \times \delta x$ to estimate the change in the dependent variable y resulting from changes in the independent variable x
- Use derivatives and second derivatives to sketch curves and to solve practical problems

Theoretical Components

STEP 1
Resources:
Maths Quest Year 12 Chapter 7(printed copy), and Chapter 8 (pdf on Google Drive)

Lessons:

- Small change and marginal rates

https://mathspace.co/learn/ac-methods-12/differentiation/small-changes-and-marginal-rates-38965/small-changes-and-marginal-rates-1973/

Practical Components

STEP 2
Do the mathspace.co questions:

- Small change and marginal rates

https://mathspace.co/learn/ac-methods-12/differentiation/small-changes-and-marginal-rates-38965/questions/

Further Practice with Rates of Change

- **Do Exercise 8E**

Do mathspace.co custom task on

- **Further Sketching Practice**

Investigation

STEP 3
Do the mathspace.co custom task.

- **Small changes and marginal rates**

No investigation for Week 8 as it is test week ☺
Prepare your one-sided summary sheet.

QFO
Quiz/Forum/Other

Remember to scan in when you come to the Maths Area and when you leave.