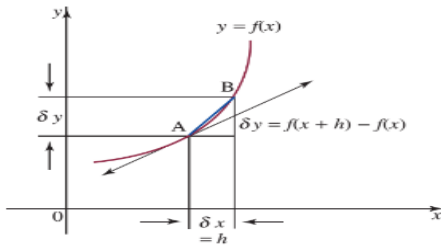


## Goals

Revise for your test.



**Test: Friday 26<sup>th</sup> March at 8:45 am – 10:45 am in the Gym**

## Theoretical Components

**Resources:** Maths Quest Year 12 Chapters 7, 5 and 8

### Knowledge checklist:

- what is a rate?
- constant and variable rates
- average rates of change
- instantaneous rates of change
- interpret graphs that illustrate rates of change
- what is a gradient function?
- what is the x-intercept of a gradient function?
- finding gradient functions by using the rule
- finding gradient functions using your CAS
- power rule
- chain rule
- derivatives of  $e^x$
- derivatives of  $\sin x$  and  $\cos x$
- the product rule
- the quotient rule
- second derivatives
- concavity
- analysing the behaviour of functions using the second derivative
- sketching polynomials using stationary points and non-stationary points of inflection
- maximum and minimum problems when the function is known and when the function is unknown
- rates of change

**QFO**

Quiz/Forum/Other

Complete a summary sheet in preparation for the **test in week 8** (two-sided hand-written A4 page). This will be collected at the end of the test ☺