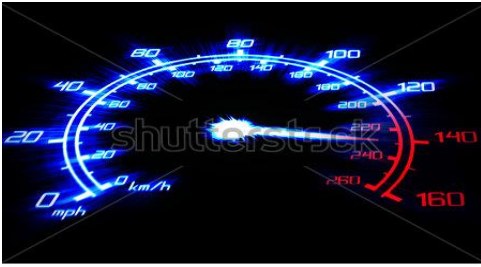


Goals

This week we are:

- Reviewing rate of change, gradient and key features of graphs
- Reviewing differentiation using power rule



Theoretical Components

STEP 1

Resources:

- Maths Quest Year 12 Chapter 7

Knowledge Checklist from last year:

- what is a rate?
- constant rates
- variable rates
- average rates of change
- instantaneous rates of change
- interpret graphs that illustrate rates of change
- equations of tangents/normals
- what is a limit?
- evaluating limits
- what is a gradient function?
- what is the x-intercept of a gradient function?
- power rule
- finding gradient functions by sketching
- finding gradient functions by using the rule
- finding gradient functions using your CAS
- sketching polynomials using stationary points
- finding maximum and minimum points and to solve problems in a practical context
- investigate speed, displacement and velocity
- primitive functions and applications

View mathspace.co lessons

<https://mathspace.co/teach2/chapter/38952/1963/>

<https://mathspace.co/teach2/chapter/38955/1954/>

Practical Components

STEP 2

10 Quick Questions (collect printed handout)

On mathspace.co there are three custom tasks for you to complete.

1. Review Rate of Change
2. Key Features of Graphs and the Derivative
3. Differentiation Using Power Rule

Investigation

STEP 3

As it is orientation week go to each timetabled lesson. There will be no investigation for the week that will count towards one hour.

Remember to scan in and to scan out.

QFO

Quiz/Forum/Other

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