# Partial fractions

For

, sub

For

# Parametric equations

Change subject:

1. To t
2. To trigonometric functions of t, then sub

* Domain = range f(t) [x]
* Range = range g(t) [y]

# Binominal expansion

# Differentiation

Implicit: “Differentiate all xy, add behind all differentiations of y”

Chain rule substitution: “ etc.”

# Integration

Rotating about x-axis & y-intercept

By substitution: “sub find and replace all functions of with ”

By part:

* Use partial fractions!
* Common trigo integrations

## Solving differential equations

# Vectors

“Insert triangle rules”

Column vector:

Resultant vectors:

For :

Magnitude =

Unit vector =

Unit vectors are vectors with magnitude of 1

## Parallel vectors

A set of parallel vectors:

For

If **:**