links to videos

3.7 INTEGRATION

- where underlined there is a link to activities on EP
- numbers indicate pages in Nulake workbook

Integration

- integrate polynomials 3-5
- finding the constant of integration
- integrate e^x functions # 6-7
- integrate trig functions # 8-10
- integrate 1/x functions # 11-12
- integrate (a+bx)/x 13-14

Areas of integration

- find the area under a curve
- calculate areas with parts above and below x-axis 31-43
- calculate areas between curves 40-43
- use an area to find constant

Rates of change

- solve simple kinematics problems 44-45
- solve more complex kinematics problems 46-48

Integration rules

- integrate (ax + b) / (cx + d) # 15-17
- integrate f '(x) / f (x) 18-20
- integrate trig products using formulae 21-23
- integrate using given substitution
- integrate products and quotients using substitution 24-27
- evaluate definite integrals # 28-30

Numerical methods

- estimate an area using rectangle rule 49-50
- estimate an area using trapezium rule 51-54
- estimate an area using Simpson's rule 55-58

Differential equations

- solve simple differential equations in the form dy/dx = f(x) including particular solutions 59-63
- solve second order differential equations including particular solutions 64-67
- solve differential equations by separating variables including particular solutions 68-72
- solve problems involving simple differential equations 73-76
- solve problems involving applications of differential equations including Newton's Law of Cooling 77-81

PAST NCEA QUESTIONS

2013		Exam	Schedule
2014:	EP	Exam	Schedule
2015:	EP	Exam	Schedule
2016:	EP	Exam	Schedule
2017:	EP	Exam	Schedule
2018:		Exam	Schedule
2019:		Exam	Schedule
2020:		Exam	Schedule