Assessment Task Notification

All students are asked to sign the teacher's copy to verify this notification has been distributed before the task date.

Course:	HSC Mathematics General
Task Number:	3
Date of Task:	Term 2, Week 8, 2017 Thursday 15th June
Task Value:	20%
Nature of Task:	Class test – 55 minutes **Students may bring a double sided A4 hand-written summary sheet into the examination.**
Outcomes Assessed:	MG2H-4, MG2H-5, MG2H-10 MG2H-1, MG2H-2, MG2H-7, MG2H-8, MG2H-9, MG2H-10

Topics, content and text references

TEXT: Cambridge HSC Mathematics General 2

Further Applications of Area and Volume (Chapter 2)
Students can be asked to:

- Calculate the area of circles, annuluses and parts of a circle
- Calculate the area of composite figures
- Apply Simpson's rule over three equally spaced points
- Apply double application of Simpson's rule
- Calculate the surface area of right prisms
- Calculate the surface area of cylinders and spheres
- Calculate the volume of pyramids and cones
- Calculate the volume of composite solids
- Determine errors in calculations resulting from errors in measurement

Applications of Trigonometry (Chapter 5)
Students can be asked to:

- Solve problems using trigonometric ratios in one or more right-angled triangles
- Solve problems involving compass and true bearings
- Determine the sign of trigonometry ratios involving obtuse angles
- Use the sine rule to nd lengths and angles
- Calculate the area of a triangle not involving a right-angle
- Use the cosine rule to find lengths and angles
- Use trigonometry to solve a variety of problems
- Solve problems involving offset and radial surveys

Sampling and Population (Chapter 11)
Students can be asked to:

- Recognise that a sample can provide an estimate of a population characteristic
- Apply counting techniques to list all possible samples
- Verify that the mean of all possible sample means is equal to the population mean
- Describe and use the capture–recapture technique
- Generate random numbers with a table, calculator or spreadsheet
- Recognise the effect of sample size in estimating the nature of a population