Wee 17/18
Term 2
201

Learning Brief

MA1 Matrices, Sequences and Mensuration

Goals

Topic: Mensuration (another word for measurement)

- use length, area and volume measurement techniques in practical situations
- understand and apply the fundamentals of trigonometry

This week:

Using the AREA RULE - working with scalene triangles, non-right angled triangles to:

- find area given two other sides and their included angle
- Review Mensuration – perimeter, sector lengths, area, surface area, volume of prisms and pyramids, capacity Pythagoras' Theorem and trigonometry

Theoretical Components

This week - Area of a Triangle:

Area = ½ abSinC
Area = ½ acSinB
Area = ½ bcSinA

Area rule explained:

http://www.youtube.com/watch?v=WEOVjRMh_vI

Read and copy examples section 7E Red Book. View any worked examples & tutorials from Jacplus.

Read and copy examples section 8I Purple Book. View any worked examples & tutorials from Jacplus.

Remember to take clear, legible notes and diagrams of definitions, theorems and worked examples.

Reminder – when converting degrees as a decimal to degrees in Degrees, Minutes and Seconds (DMS), nearest minute may be required.
Also, using exact values for length or trig ratios will NOT be required for the test, e.g. $2\sqrt{3}$, $\frac{\sqrt{2}}{2}$ etc

Practical Components

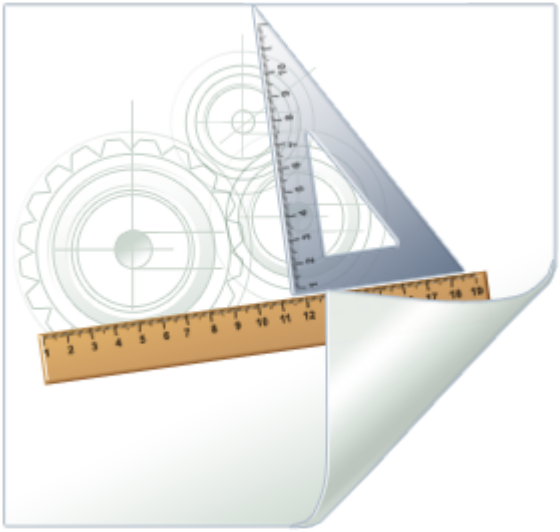
Area of a Triangle
e-book 2 (Red Book) Chapter 7
Exercise 7E
If you want more practice:
e-book 1 (Purple Book)
Exercise 8L

Measurement Review
e-book 2 (Red Book)
Chapter Reviews – Chapter 7 and 10
Do not do questions on radian measurement (7F,G) or similar figures (10G,H,I)
e-book 1 (Purple Book)
Chapter Reviews – Chapter 7 and 8
Do not do questions on similar figures and scale factors (7E,F,G)

Investigation

Complete all previous Investigations if you have not already done so. You must submit all Investigations in a folder by the end of Week 17. See Toby to make sure you are up to date and do not have any missing items.

Week 18 you need to attend for at least one hour face to face and revisit the Quizzes as revision for Weeks 12, 14 and 16.



F/Q/O

There is NO Forum for Week 17 – have another go at all the Quizzes on measurement.

Make sure you have submitted a FORUM POST for Weeks 10,11 and 15.

Remember you have to have done the **meshing test**. This is part of the assessment and your ranking in the year. Also, attend your 2 hours face to face **for Week 17. Week 18** you need to attend at least one hour face to face and revise eg use the Quizzes for Weeks 12, 14, and 16 and extra skills tests in the text (see digital resources sections)
No new quiz for this week. Quizzes for Weeks 12, 14 and 16 may be attempted many times. Complete more of the Practical Components before you attempt any quiz.