The numeracy basics program is being run in Years 7 through to 10 to help students develop their conceptual mathematical understanding. It is a test which consists of 50 questions covering fundamental mathematical content from preceding years of the Australian Curriculum syllabus. It is our belief that a student will be able to experience successful learning if they are basing it on a solid foundation.

Reasons for running this testing include:

- It will clarify to parents and students the desired capability level.
- It will identify students who are struggling with specific content.
- It can be used for remediation and practice of skills.

Each test is created using a Microsoft Excel spreadsheet which generates random numbers for each question. Students are encouraged to ensure that they have a copy of this spreadsheet on their home computer, so they can generate multiple versions of the test to use for revision purposes. Students/parents can access a copy of the spreadsheet via one of the following:

- Students can put a copy on their USB from the Student_Common directory (for example, a Year 8 general maths student would find the file at: \Student_Common \Year-8 \Mathematics \MAG08 \Student-Get-Work)
- Students can access this file using the “Foldr” app on their iPad, though they will need to email the spreadsheet to themselves to access from home. The functionality contained within this spreadsheet is not supported on the iPad.
- Alternatively, parents can email their daughter’s mathematics teacher and ask them to email a copy of the spreadsheet.

Note 1: Two versions of the spreadsheet have been created. One using the 2010 version of Excel. The other has been created so it is accessible through older versions of Excel.

Note 2: When opening the spreadsheet, the message below is likely to be seen. This spreadsheet contains Macros (computer programming code). Please click on “Enable Content”.

Each test is non-calculator, and has a maximum of 40 minutes. The expected finish time is between 20 to 30 minutes. Students finishing earlier than 20 minutes will receive a bonus mark, students finishing after 30 minutes will have a penalty applied (as detailed on top of the test paper). This is designed to reward (and encourage) mathematical fluency – ie the rapid recall of mathematical facts.

There will be a number of these tests throughout the year (six of them for years 7, 8 and 9, less for year 10). The weighting per test incrementally increases, with the first test being worth the least through to the final test which is worth the most. This is to ensure that a student is
not overly penalised at the start of the year if they are initially struggling with some of the concepts.

Our aim is to ensure that each student reaches the “Satisfactory” benchmark (as a minimum). This has been set at 80%. The benchmark for “Competent” has been set at 90%. Below 80% is deemed “Unsatisfactory”. The reasons why these benchmarks have been set at such a high level are as follows:

- The concepts being tested are fundamental to future mathematical success and need to be mastered.
- The “style” of question does not change from one test to the next. There are no trick questions. Once a student has practiced a number of these tests, they should not be surprised by what appears.

Do not be alarmed if your daughter initially receives an “Unsatisfactory” rating. The Australian Curriculum is still relatively new, and has been set at a high standard. Remember, this test is being used to identify which skills are lacking, and hence identify the areas which need to be worked on.

Remediation can be obtained from the following sources:

- The mathematics focus room is open daily during the second half of lunch, with a mathematics teacher rostered on duty to assist students.
  - Your daughter’s mathematics teacher will assist when time permits. Note: Time constraints, volume of students, and requirements to teach the actual syllabus could impact on how effectively your daughter’s teacher can assist (whereas there are likely to be more opportunities for one-on-one assistance in the focus room).
- Afterschool homework classes operate in the library from Monday through to Thursday, and there are generally a number of teachers on duty who will be capable of assisting with this level of mathematics.
- Other sources include family and friends who are mathematically competent, as well as the internet.

All students are expected to try to improve their understanding in areas where they struggle. Parents are requested to:

- Ensure they review and sign each test paper when it comes home.
- Encourage their daughter to practice the skills in questions where they have experienced difficulty (i.e. getting her to seek help from one of the above sources).

It is not uncommon for students to find mathematics challenging. A common reason for this relates to a lack of understanding of the fundamental concepts. Our aim is to help students develop a more solid mathematical understanding, hence creating the foundation upon which successful learning can take place. With your continued assistance and a genuine effort from the student, I am confident we will be able to achieve this goal.

Regards

Mr Peter Mee
Head of Learning Area - Mathematics