

SCHOOL MATHEMATICS COMPETITION for 2018

The Hamann School Mathematics Competition for Society of Petroleum Engineers (SPE) Prizes

The setters of the 2018 SMC propose to make changes to the format of the questions for the 2018 paper. Four papers will be set –

- Primary paper (year 6 – 7)
- Junior paper (year 8)
- Intermediate paper (year 9 – 10)
- Senior paper (year 11 – 12)

The number of questions in all papers will be 24 with –

- Questions 1 – 12 relatively easy answers only – (3 marks each)
- Questions 13 – 18 somewhat more demanding - answers only (4 marks each)
- Questions 19 – 24 demanding and require written solutions (5 marks each)

Note - It is a mathematics competition and easy does not mean trivial

The following are some of the reasons for these changes:

- The best students are getting better and we need to identify prize winners clearly
- In the previous format, many students make little progress with later questions
- It is difficult to achieve consistency in the marking of the more complex questions
- The marking will be simplified as well as more consistent
- The new questions will hopefully give students more opportunity to demonstrate their understanding of mathematics and problem solving skills without necessarily having an advanced background in algebra and geometry
- Many overseas competitions use a similar format
- A better balance with questions in algebra, geometry and problems which allow alternative methods of solution can be achieved.
- Parental feedback at Presentation Nights strongly support the competition and the opportunity it gives their children to perform at the highest level

THE COMPETITION

2018 will be the 57th Year of SMC – it is a major event in MASA activities. The Society of Petroleum Engineers (SPE) has been our Sponsor for many years and continues to strongly support the Competition. Their leadership in encouraging our best students to continue their studies in mathematics has been greatly appreciated.

As well as being an opportunity for students to show their mathematical interest and ability it offers good money prizes to those who achieve a prize, a high distinction or a distinction. Schools, especially those with a STEM curriculum, should be taking an active role in promoting this competition.

For 2018 in addition to individual prizes we will be offering team prizes. At each level there will be a team prize for the schools with the highest aggregate score for their first ten students MASA is also considering a prize for schools with small number of entrants.

SAMPLE QUESTIONS for each division are also available on our website ([click here](#))