

SAMF

South African Mathematics Foundation

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SAMF eNewsletter - November 2013

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Foreword - Prof Johann Engelbrecht

The fourth and final quarter of the year highlights the South African Mathematics Foundation's activities through its Annual Gala Awards Evening, which was held at the Kopanong Hotel in Benoni on 12 October this year. I would like to congratulate Robin Visser and Bronson Rudner for being announced the over-all winners in this year's South African Mathematics Olympiad.

Furthermore I would like to congratulate each of the more than 120,000 primary- and high school learners, as well as their teachers, in their performance in this year's South African Mathematics Challenge and -Olympiad. Taking part in these competitions benefits each and every learner, whether they make it to the final round or not. We would like to thank the teachers for all their hard work in preparing the learners for participation and for motivating the learners to take part each year, thus improving their performance as they gain more experience at Olympiad mathematics over time.

Next year is going to be an important one for Mathematics in South Africa. In July 2014 the country will be hosting the International Mathematical Olympiad at the University of Cape Town. We expect more than 600 of the world's top young mathematicians to compete in this prestigious Olympiad.

The South African team will be announced towards the end of May next year and the selection process for the team will commence at the first of three training camps to be held in December this year. Learners who excelled during the third round of the South African Mathematics Olympiad this year, definitely stand a chance at being chosen to represent their country in July next year, but nobody is excluded at this stage - performance in the South African Mathematics Olympiad is not the only criteria that is used when we select the team.

Learners who would like to represent their country at the International Mathematical Olympiad in Thailand in 2015 should register for next year's South African Mathematics Olympiad. Teachers can be on the look-out for the registration form that will be sent to their respective schools early in the New Year. The first round of this national Olympiad for high school learners will take place during March. For more information on the activities and programmes planned for next year, please contact our head office.

In closure I would like to thank all the people who selflessly contributed to our mathematics activities this year. Without your participation it would not have happened. I also wish each and every one of you a blessed festive season. Travel safely and recharge those batteries. May 2014 be a good year filled with love, laughter, happiness, success and more mathematical enjoyment.





The entire SAMF team wishes you a Merry Christmas and a Happy New Year!

SA's Top Young Mathematicians Awarded

On 12 October the South African Mathematics Foundation (SAMF) announced Robin Visser and Bronson Rudner as the country's top High School mathematicians of the South African Mathematics Olympiad (SAMO) at their annual award ceremony held at the Kopanong Hotel in Benoni.

Gold medallist in the senior division, Robin Visser is a Grade 11 learner at St George's Grammar School in the Western Cape who describes himself as weird yet humorous. "I would like to thank everyone who helped me achieve the Gold medal," he says. "My parents, math teachers, math coaches at the numerous universities as well as friends who don't mind when I talk to myself." Visser, who was also a member of the South African team that competed at the International Mathematical Olympiad (IMO) in Colombia in July this year, is also extremely grateful for everything the SAMF does for Mathematics in the country.

A Grade 9 learner at the South African College High School (SACS) in the Western Cape, Bronson Rudner is the Gold medallist in the junior division and says that he would like to thank the SAMF for organising the SAMO. "Without them, none of this would be possible," he continues. "I would also like to thank my parents, who have supported me wholeheartedly and who have especially been ready and willing to help with transport to training venues and competitions. My school has also supported me the whole way and provided me the opportunity to compete in mathematics competitions at various levels."

Organised by the SAMF and sponsored by Harmony Gold Mining Company and the South African Institute of Chartered Accountants (SAICA), the SAMO is the biggest Olympiad of its kind on the continent. The Olympiad consists of three rounds, the first for which 81,440 learners in Grades 8-12 attempted to solve Mathematical problems that are not part of the normal school curriculum. Following the first round in March, 11,847 top performing learners moved on to the second round that took place in May with 199 learners from 107 High Schools across the country that competed in the final round in September.

Mashego Mashego, Executive Director at Harmony, is proud to be associated with the SAMF and their learner as well as teacher development programmes. "Harmony recognises the critical role of education in transforming South Africa," he says. "The SAMF is but one of the initiatives that forms part of our commitment to the sustainable socio-economic development and well-being of our communities."

"Reaching the second round and ultimately the final is a great achievement," says Chantyl Mulder, Senior Executive: Transformation and Growth at SAICA. "It shows not just a talent for mathematics and problem solving, but also demonstrates a willingness to learn and challenge yourself. The chartered accountancy profession is in dire need of talented learners who are studying core mathematics."

Approximately 60 top performing learners will now be invited to attend the first of three Olympiad Training Camps in December during which the selection of the South African team for the IMO in 2014 will commence. The IMO 2014 will be taking place in Cape Town from 3 to 13 July 2014 and it is the first time since its inception in 1959 that this annual Olympiad will take place on African soil.

"In this exciting time where we are preparing and anxiously anticipating the IMO in South Africa next year," says Prof Johann Engelbrecht, Executive Director at the SAMF. "We should exploit this great opportunity to promote Mathematics much wider than for the few learners that will make the South African team for the IMO. I hope we can take hands with government and the private sector to do something serious about the Mathematics situation in the entire country. Mathematics is in the news at the moment. Let's make sure the message that Mathematics is essential for the future of the country is conveyed and appreciated all over the country."

For the full list of winners, please click [here](#).



Bronson Rudner, Prof Johann Engelbrecht & Robin Visser

Thousands of Primary School Math Boffins Compete

Each year, thousands of learners in Grades 4 to 7 from Primary Schools across the country participate in the South African Mathematics Challenge. Co-ordinated by the South African Mathematics Foundation (SAMF) as well as the Association for Mathematics Education of South Africa (AMESA) and sponsored by Sasol, the Challenge saw more than 71 000 learners participating in the first round which took place earlier this year.

The Challenge, which originated in 1977 as a project of AMESA, aims to improve problem solving skills in young learners thus preparing them for High School and tertiary education as well as equipping them with important life skills.

Pam Mudhray, Group Community Affairs Manager at Sasol says that the importance of Mathematics education on primary school level is frequently overlooked and this Challenge addresses the gap that often exists between Grade 7 and 8. "Improving school-based education is one of Sasol's key community development objectives and through supporting this Challenge we want to encourage children and communities as whole to explore mathematics. There are many myths and beliefs that maths is "hard" and through initiatives such as these we hope to create a love for the subject as children learn through competition and fun."

Learners' achievements are acknowledged by awarding Gold, Silver and Bronze certificates based on their results. This year a total of 3 662 certificates were issued of which 550 were Gold, 1 741 Silver and 1 371 Bronze. The City of Tshwane had the highest number of certificates issued followed by Cape Town and East London.

Prof Johann Engelbrecht, Executive Director at the SAMF is delighted with the number of female participants in the Challenge. "Historically, mathematics and science is seen as a male activity. Boys also generally tend to be more competitive than girls and although boys and girls show the same average performance in mathematics the variation in performance is more widely scattered in the male population. In the first round of the Challenge 32 199 participants were girls compared to the 31 277 boys that competed."

Another notable statistic is that 29 599 of the learners who participated in the first round were African followed by 21 492 Caucasian and 7 463 Coloured with the balance Asian. "We at SAMF are pleased with the increased participation of African learners in Primary Schools and believe that this statistic will soon be prevalent in participation in other Olympiads at senior level such as the South African Mathematics Olympiad (SAMO) for Grades 8 to 12."

Participating in the Challenge ultimately prepare the learners for the SAMO and other High School Olympiads such as the Pan African Mathematical Olympiad (PAMO) as well as the International Mathematical Olympiad (IMO), the latter which will be hosted in Cape Town during July 2014. It is the first time this prestigious Olympiad will be taking place on the continent since its inception in 1956.

Western Cape Mathematics Teams in First Place

On 7 September two teams, one junior (Grades 8 and 9) and one senior (Grades 10 to 12) from 16 regions in the country competed for first place in the Southern African Interprovincial Mathematics Olympiad (SAIPMO).

Organised by the South African Mathematics Foundation (SAMF) in association with the Actuarial Society of South Africa and Casio, the first part of the Olympiad was a one-hour individual problem paper and consisted of 15 problems in multiple-choice format. The second paper consisted of ten quite difficult problems, which teams solved together.

The Western Province teams from Cape Town made a clean sweep this year with Western Province Team A emerging as the winners of the Senior Division with their Team A also taking first place in the Junior Division.

Top regions in this Olympiad in the Senior Division are:

- Second place – Western Province Team B
- Third place – Team Port Elizabeth from the Eastern Cape

The regions that stood out in the Junior Division are:

- Second place – Siyanqoba Team A from the Eastern Cape
- Third place – Siyanqoba Team A from KwaZulu-Natal

The captains of the two winning teams received the teams' prizes at the Annual Gala Award function that was held on 12 October.

Important 2014 Dates

7 February: Closing date for registration for the South African Mathematics Olympiad (Grades 8-12)

13 March: First Round - South African Mathematics Olympiad (Grades 8-12)

12-16 May: First Round - South African Mathematics Challenge (Grades 4-7)

13 May: Second Round - South African Mathematics Olympiad (Grades 8-12)

30 July: Final Round - South African Mathematics Challenge (Grades 4-7)

10 September: Final Round - South African Mathematics Olympiad (Grades 8-12)