



Isalathiso: 20200116-3146
Inombolo yefayili: 12/2/8/7/3
Imibuzo: AJ Lamprecht

INGcaciso eMfutshane yeCandelo leKharityhulam ye-GET: DCG 0001/2020

Iya: KumaSekela Balawuli-Jikelele, kuBalawuli abaziiNtloko, kuBalawuli, kwiiNtloko zokuNika iNkxaso kwiKharityhulam, kwiiNtloko zoKuphathwa noLawulo lwamaZiko, kuBaphathi beeSekethe, kumaSekela eeNgcali zeMfundo eziziiNtloko, kubaQuquzeleli be-GET, kuBacebisi ngeZifundo beSigaba esiPhakathi, kuBacebisi ngeZifundo beSigaba esiPhakamileyo nakwiiNqununu zazo zonke izikolo zikarhulumente eziqhelekileyo nezezikolo ezizimeleyo

Isihloko: UKhuphiswano lwe-South African Mathematics Challenge lwamaBakala 4-7 kunye ne-South African Mathematics Olympiad yamaBakala 8 no-9

1. Ukhuphiswano i-**South African Mathematics Challenge (SAMC)** lithuba elihle elimalunga nesifundo seMathematika elenzelwe abafundi bamaBakala 4 ukuya ku-7 ukanti yona i-**South African Mathematics Olympiad (SAMO)** lithuba elihle lesifundo seMathematika labafundi bamaBakala 8 kunye no-9. Injongo ye-SAMC kunye ne-SAMO kukuphucula umgangatho wokufundisa nokufunda iMathematika ngokubonelela abafundi ngeengxaki zezibalo (*mathematical problems*) ezinika umdla nezingumngeni kwinqanaba lamabakala abo nokuphuculwa kwezakhono zabo zokubala zenkulungwane ye-21.
2. I-SAMC ne-SAMO ziineenjongo:
 - zokwenza iMathematika ithandwe;
 - zokukhuthaza ukusonjululwa kwengxaki zokubala ekufundiseni iMathematika;
 - zokukhuthaza imbono yokuba imisebenzi yeMathematika ayipheleli nje ekubaleni;
 - zokugxininisa ukubaluleka kokufunda xa kusenziwa imisebenzi yemathematika;
 - zokuzisa izixhobo zokufunda ezifaka igalelo kwimisebenzi enentsingiselo yemathematika eziklasini;
 - yokubonelela ngesixhobo esi-*diagnostic tool* sokufumana ulwazi ngeengxaki zabafundi ukulungiselela ootitshala bakwazi ukuziqwalasela izimvo ezingachanekanga.
3. I-SAMC ne-SAMO azikho malunga nokhuphiswano nje kuphela, kodwa zinenjongo yokubonisa abafundi iingxaki ezingumngeni zemathematika. Imibuzo yenzelwe

ukuphucula ulwazi, ukusebenzisa ulwazi kwiimeko ezintsha, ukunxibelelana kunye nokucinga ngendlela yokusebenzisa imathematika ngokubanzi.

4. Zimbini iindlela zokuthatha inxaxheba:
 - Abafundi abanamandla bangakhetha ukuthatha inxaxheba ngabodwa. (babe bodwa).
 - Abanye abafundi bangakhetha ukusebenza ngababini (babe babini).
5. **I-2020 South African Mathematics Challenge** iya kuba **nemijikelo emithathu**:
 - Umjikelo wokuqala: 09–13 Matshi 2020
 - Umjikelo wesibini: 27 Meyi 2020
 - Umjikelo wokugqibela: 28 Julayi 2020
6. **I-2020 South African Mathematics Olympiad** iya kuba **nemijikelo emithathu**:
 - Umjikelo wokuqala: 12 Matshi 2020 (ifom yokungenela iqhotyoshelwe njengesihlomelo A)
 - Umjikelo wesibini: 14 Meyi 2020
 - Umjikelo wokugqibela: 23 Julayi 2020
7. Kucetyiswa ukuba izikolo zinike abafundi ithuba lokuba basebenzise amaphepha eminyaka edlulileyo, ukuze zikhethe kwaye zingenise abo bafundi baphendule ngokuyimpumelelo kuhlobo oluthile lwemibuzo nezibalo ezikumaphepha eminyaka edlulileyo.
8. Amangeno sele evulelekile. Izikolo ezifuna ukungenela, kufuneka zibhalise kwi-*South African Mathematics Foundation (SAMF)*. ISebe leMfundo leNtshona Koloni (iSebe iWCED) liya kuyibhatalela imali yamangeno abafundi. **Umhla wokuvala kumangeno yi-31 Januwari 2020.**
9. Amaphepha omjikelo wokuqala aya kuhanjiswa ngabaququzeleli besithili/ beseke the nge-imeyili kwaye izikolo kufuneka zibenzele iikopi abafundi bazo abathabatha inxaxheba.
10. Umjikelo wokuqala uya kubhalelwa esikolweni. Ootitshala bangazimakisha iimpindulo okanye zingamakishwa ngabafundi ngexa kusenziwa ingxoxo evulelekileyo eklasini. I-SAMF iya kuyibonelela imemorandum.
11. Umjikelo wesibini uya kwenzelwa kuphela abafundi abafumene u-50% okanye ngaphezulu kumjikelo wokuqala kwaye uya kubanjelwa kwiindawo ezifikelelwa ngumntu wonke kwiingingqi ezahlukeneyo.
12. Umthabathi-nxaxheba ngamnye kwi-SAMC/SAMO uya kuvavanywa ubuncinane ngengxaki yesibalo enye, eya kuphucula isakhono sakhe sokusombulula iingxaki zokubala. Isakhono sokusombulula iingxaki zezibalo singaphuculwa ngokungaphezulu ngokusebenza ngononophelo ukufumana izisombululo zale

mijikelo. Kuya kubakho izisombululo ezizezinye nezitsha kwaye kucetyiswa ukuba iingxaki zezibalo ezisetyenziswe kumaphepha kufuneka zisetyenziswe njengoovimba abazizibonelelo zokuxoxa eklasini.

13. Izakhono zokusombulula iingxaki ezibubuchule ziyimfuneko kakhulu kwaye ziyathengiseka kwimarike yelizwe jikelele zobuchule banamhlanje obujongise kwithekhnoloji. UMzantsi Afrika kufuneka ukwazi ukukhuphisana namanye amazwe yaye ukwafuna neengcali ezingabasombululi-zingxaki. Ukuziqhelisa ukusombulula iingxaki kuya kunceda ukuqeqesha iinkokeli zethu zangomso ukulungiselela ukuphuculwa kwethekhnoloji.
14. Amalungiselelo okuqhubeka kwala makhuphiswano omabini, anokufumaneka ngokungena apha-<http://www.samf.ac.za/en/sa-mathematics-challenge> ngokumalunga ne-SAMC kunye nalapha: <http://www.samf.ac.za/en/sa-mathematics-olympiad> ukwenzela i-SAMO.
15. I-SAMF iqwalasela impumelelo kwaye iwonga ngezi zatifikethi zilandelayo:
 - Isatifikethi sombala wegolide (*Gold certificate*): Kubo bonke abafundi abapase ngaphezu ko-80% kumjikelo wokugqibela
 - Isatifikethi sombala wesilivere (*Silver certificate*): Kubo bonke abafundi abapase phakathi ko-60% no-79% kumjikelo wokugqibela
 - Isatifikethi sombala wobhedu (*Bronze certificate*): Kubo bonke abafundi abapase phakathi ko-50% no-60% kumjikelo wokugqibela.
16. Ingingqi nganye inokuququzelela itheko lokuwonga isikolo sasekuhlaleni kwingingqi leyo.
17. Ukufumana ezinye iinkcukacha kunye namaphepha eminyaka edlulileyo neememorandam, izikolo zingabhalisa njengabasebenzisi bewebhu apha-www.samf.ac.za. Kubalulekile ukuba abafundi banikwe ithuba lokusebenzisa amaphepha eminyaka edlulileyo ukuphucula izakhono zokusombulula iingxaki zezibalo ezisisiseko phambi kokuba bangele ii-Olimpiyadi.
18. Kucelwa ukuba iinqununu zazise okukule ngcaciso imfutshane bonke ootitshala beMathematika ukuze bakuthathele ingqalelo.

ISAYINWE: NGU-PAD BEETS

USEKELA MLAWULI-JIKELELE WEKHARITYHULAM NOLAWULO LOVAVANYO

UMHLA: 2020-01-24

2020 ENTRY FORM

Quintile	1	2	3	4	5	NA
School						
Postal address						
Street address						
Province/Country						
School's telephone						
School's email						
School's Olympiad Manager						
Cellphone number						
Email						

Please indicate

- Total number of learners in the school
- Choose 1 of the three options:

Public school	Private school	Home school
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- Indicate your school's location:

Rural	Township	Urban
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- Is your school part of the MST Grant project?

Yes	No
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STATISTICS: FIRST ROUND PARTICIPANTS

Please complete the following required information for reporting purposes. (Names of learners are not required.)

Grade	Seniors				Juniors		
	10	11	12	TOTAL	8	9	TOTAL
Asian							
Black							
Coloured							
White							
TOTALS							
Male							
Female							

Note: Combine Gr 7 learners with Gr 8 total

FOR OFFICE USE ONLY	School's code number						
Payment date							
Question papers	Jnr	Snr	Email				
Solutions	Jnr	Snr	Email				
Answer sheets	Jnr	Snr	Email				
Certificates	Instructions						
2nd round registration form	Confirmation letter						
Parcel checked by							

PAYMENT DETAILS		THIS ENTRY FORM SERVES AS A TAX INVOICE		VAT no: 452 026 3569			
Please complete the section below:							
Entry Option	No. of learners	Price per learner (incl. 15% VAT)	Total amount	Method of payment	Post certificates		
ONLINE OPTION South African Schools: i.e. online registration; online payment; downloading question papers & answer sheets; uploading 1st round results Entrants from SADC countries outside SA (online only) Entrants from other countries outside SA (online only)		@ R20 per learner		Do your registration & payment online! Pay online via Payfast	N/A		
		@ R75 per learner					
		@ \$11 per learner					
South African schools: email option (i.e. we email the papers etc. and you have to make copies)		@ R25 per learner		Electronic transfer NB: submit your school's name as reference. SAMF - ABSA Bank - Branch: Hatfield Account No. 4061037913 Branch code: 632005	N/A		
South African schools with > 100 entrants		@ R30 per learner			Yes	No	
South African schools with ≤ 100 entrants		@ R35 per learner			Yes	No	
Quintile 1 & 2 schools with ≤ 100 entrants		Free of charge		Free of charge	Yes	No	
MST schools with ≤ 100 entrants		paid by Provincial Department		paid by Provincial Department if arranged	Yes	No	
Sponsorship (only ≤ 100 entrants)		see p.2 for info)		Submit written request	Yes	No	
TOTAL NO. OF LEARNERS		TOTAL AMOUNT					

NOTE: Entries without the correct entry fee or without proof of payment will be rejected. No refunds will be given for rejected, late or cancelled entries. It is each teacher's responsibility to ensure that entry forms and payments/proof of payments are submitted on time. Schools from SADC countries must please exchange their currency to South African Rand.

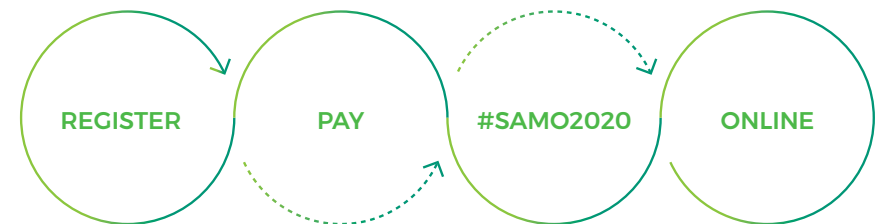


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OLD MUTUAL SOUTH AFRICAN MATHEMATICS OLYMPIAD

FIRST ROUND: 12 MARCH
CLOSING DATE FOR ENTRIES: 31 JANUARY



OLDMUTUAL



THE THREE ROUNDS

First round, 12 March

The junior division consists of separate papers for grades 8 and 9 and the senior division of one paper for grades 10 to 12. Each paper consists of 20 multiple-choice questions and learners have one hour to complete the paper and the school can schedule its own time. **Marking:** The teachers at the entrants' schools mark the answers. Each school will be provided with the solutions. This ensures immediate feedback.

Second round, 14 May 14:00 - 16:00

Learners who attain 50% and higher in the first round qualify for the second round. There are separate papers for the juniors and seniors. The grade 8 and 9 learners write the same paper. The learners have two hours to complete 25 questions. Learners who participate in the second round will receive a certificate.

Marking: The answers are marked by SAMF.

Third round, 23 July 09:00 - 13:00

The 100 best senior and 100 best junior learners from the previous round qualify for the third round. There are separate papers for the juniors and seniors. Third round participants will each receive a bronze medal and certificate. The best 10 learners per division will receive their prizes at the annual award function.

WHY SHOULD YOU ENTER

- Mathematics competitions generate a lot of enthusiasm and curiosity for the subject.
- Learners will be exposed to problems that will test and improve their ability to discover, validate and solve problems. In short, they will become better mathematicians.
- The Maths Olympiad is recognised as one of the best vehicles to identify the most talented learners in the country.
- Participation will result in the school providing improved skills and will better prepare their learners for university.
- The type of problems is similar to those used in entry level university testing and will provide especially the grade 12 learners with valuable experience.
- Working through past question papers is one of the best ways to prepare for the Olympiad.
- Past question papers and solutions are available on our website - www.samf.ac.za. Register as a user and log in to gain access to these resources.
- SAMF has a wide variety of publications, use the link: www.samf.ac.za/content/files/Documents/SAMF_Publications_2019.pdf

REGISTRATION DETAILS

CLOSING DATE 31 JANUARY 2020

- The last date to submit your entries is on 31 January 2020.
- You can register and pay online to ensure your entry!
- Absolutely no late entries will be accepted.
- Email your completed entry form and proof of payment (we can only register your school if we receive both documents) to info@samf.ac.za or fax it to +27(0)12 392 9312

ENTRY OPTIONS

(See last page for details)

1. Online option at R20 per learner includes online registration; online payment; downloading final instructions, question papers, answer sheets, solutions & certificates; submit 1st Round results in Excel.
2. Email option at R25 per learner includes final instructions, question papers, answer sheets, solutions & certificates by email and you make necessary copies; submit 1st Round results in Excel.
3. Standard option:
 - South African schools at R30 - R35 per learner includes final instructions, question papers, answer sheets, solutions and certificates. These will be posted as soon as we have received your entry form and proof of payment.
 - Quintile 1, 2 schools can enter up to 100 learners free of charge.
4. Schools outside South Africa:
 - Schools in SADC member countries at R75 per learner. (Only ONLINE option available i.e. no hard copies will be posted.)
 - Schools outside South Africa (not SADC) at \$11 per learner. (Only ONLINE option available i.e. no hard copies will be posted.)

ENTRY SPONSORSHIP

If a learner or Quintile 3 school cannot afford the entry fee, a written request for sponsorship must be sent with the entry form. Not more than 100 sponsored entries per school are allowed.

CONTACT INFORMATION

South African Mathematics Foundation
Tel: +27(0)12 392 9324/16
Email: info@samf.ac.za
Website: www.samf.ac.za

ARE YOU AWARE OF THE SAMF AWARDS YOUR SCHOOL AND LEARNERS COULD BE IN LINE FOR?

AT THE NATIONAL AWARDS FUNCTION 19 SEPTEMBER IN CAPE TOWN:

FOR LEARNERS

- **Senior Overall Winner**
Gold medal, R15 000, iPad
- **Junior Overall Winner**
Gold medal, R7 500, iPad
- **Runners up Seniors**
Silver medal, R5 000
- **Runners up Juniors**
Silver medal, R3 000
- **Best performing female learner**
Best Senior and best Junior female learner (if not in top 10). Trophy, R1 500
- **Best performing South African black learner**
Best Senior and best Junior South African black learner. Trophy, R1 500
- **Best performing learner from outside SA**
Best Senior and best Junior learner from outside SA (if not in top 10). Trophy, R1 500
- **Best performing learner per Quintile**
Trophy, R1 000. 3rd round participation is essential.
- **Best performing MST learner**
Trophy, R1 000.
3rd round participation is essential.

PROVINCIAL AWARDS

FOR LEARNERS

- **Top 3 learners per province**
Based on 2nd round results. Provincial medal, certificate, cash prize.
- **Best performing learner per Quintile per province**
Based on 2nd round results. Provincial medal, certificate, cash prize.
- **Best performing learner from MST school per province**
Based on 2nd round results. Certificate, cash prize.

PARTICIPATION AWARDS

FOR LEARNERS

- **3rd round participation**
Bronze medal, certificate
- **2nd round participation certificate**
- **1st round participation certificate**

FOR SCHOOLS

- **20-year participation Certificate**
Awarded to a school that participated for 20 years
- **10-year participation Certificate**
Awarded to a school that participated for 10 years

FOR SCHOOLS

- **School with best participation**
Based on the number of 1st round participants compared to the total number of learners in a school
- **New school with best participation**
1st time school, based on the number of 1st round participants compared to the total number of learners in school
- **Top performing school overall**
A score is determined by considering the following number of participants: 2nd round, 3rd round & Top 10
- **Top performing MST school**
A score is determined by considering the following number of participants: 2nd round, 3rd round & Top 10
- **Top performing school per Quintile**
A score is determined by considering the following number of participants: 2nd round, 3rd round & Top 10
- **Top performing school per Province**
A score is determined by considering the following number of participants: 2nd round, 3rd round & Top 10

FOR SCHOOLS

- **Best performing school per Quintile Certificate**
A score is determined based on 2nd round results
- **Best performing MST school Certificate**
A score is determined based on 2nd round results

FOR SCHOOLS

- **Schools with substantial participation**
Certificate Based on the number of 1st round participants compared to the total number of learners in a school
Gold: 80% of school's total
Silver: 60% of school's total
Bronze: 50% of school's total
- **New school Certificate**
A school entering for the first time