

# The Living Maths Olympiad 2000

## Grade: 5

It's about the stuff in maths and the maths in stuff.

### PLEASE NOTE:

- Answer the questions according to the instructions on the answer sheet.
- You may use a calculator.
- We hope you enjoy it!

### LET OP ASSEBLIEF:

- Beantwoord die vrae volgens die instruksies op die antwoordblad.
- Jy mag 'n sakrekenaar gebruik.
- Ons hoop jy geniet dit!

### QAPHELA:

- Phendula imibuzo ngokwemigaqo ekwiphepha olinikiweyo
- Ungayisebenzisa i-Calculator
- Siyathemba uyakulonwabela!

1. According to the experts, approximately how many people live in South Africa today ?

(A) 43000

(B) 430000

(C) 4300000

(D) 43000000

(E) 430000000

2. Which length is the same as 150 m ?

(A) 0,15 cm

(B) 0,015 km

(C) 1,5 km

(D) 1500 mm

(E) 15000 cm

1. Volgens deskundige, ongeveer hoeveel mense woon tans in Suid Afrika vandag?

2. Watter lengte is dieselfde as 150 m?

1. Ngokwengcali, inokuba bangaphi abantu abahlala apha e Mzantsi Afrika namhlanje ?

2. Bobuphi ubude obulingana ne 150 m?



3. When Anna was 4, Bert was 7. When Anna was 7, Carla was 5. How old was Bert when Carla was 7?
3. Toe Anna 4 was, was Bert 7. Toe Anna 7 was, was Carla 5. Hoe oud was Bert toe Carla 7 was?
3. Xa u Anna wayeneminyaka emi 4 ubudala, u Bert yena waneminyaka esi 7 ubudala. Xa uAnna wayeneminyaka esi 7, u Carla yena wayenemi 5. Wayemdala kangakani kangoko u Bert xa u Carla wayeminyaka esi 7 ?

(A) 3

(B) 6

(C) 8

(D) 10

(E) 12

4. Susan invites 8 children to her birthday party. Her mother wants to divide 12 sausages equally among the guests. How much sausage would each guest receive?
- 4 . Susan nooi 8 kinders na haar verjaarsdag partytjie. Haar ma wil 12 worsies gelykop deel tussen die gaste. Hoeveel wors sal elke gas kry?
4. Ususan umeme abantwana abasi 8, kwipati yakhe yomhla wokuzalwa. Umama wakhe ufuna ukwahlula I soseji ezili 12 ngokulinganayo kwezi ndwendwe. Ingaba zingaphi isoseji ezizakufunganwa lundwendwe ngalunye ?

(A)  $1\frac{4}{5}$ (B)  $\frac{8}{12}$ 

(C) 1

(D)  $1\frac{1}{2}$ (E)  $\frac{2}{3}$ 

5. Refer to the previous question. If a sausage costs R1,25 each, how much will all the sausages cost together ?
5. Verwys na die vorige vraag. As 'n wors R1,25 kos, hoeveel sal al die wors tesamme kos?
5. Jonga kumbuzo ongasentla. Ukuba I soseji enye ixabisa I R1,25, ingaba xa zizonke iisoseji ziyakuxabisa malini na ?

(A) R10,00

(B) R10,25

(C) R11,25

(D) R12,50

(E) R15,00

6. A block has a mass of 3 kg. If I double the height, the width and the length of the block, how much would it weigh?
6. As 'n blok 'n massa van 3 kg het en ek verdubbel die hoogte ,die breedte en die lengte van die blok wat sal die nuwe massa wees?
6. Ibloko inobunzima obusi 3kg. Ukubu umphakamo wayo ndiyawunyusa ndiwuphina phinda kwangawo, ndize ndenze ngokunjalo ngobude nangobubanzi, iyakuba no bunzima obungakanani ?



(A) 6kg

(B) 9kg

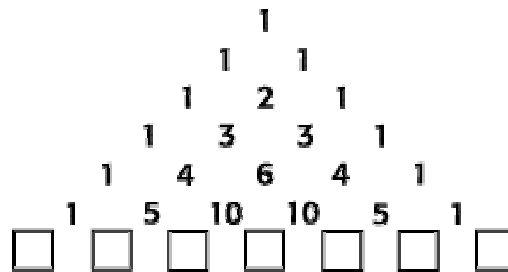
(C) 12kg

(D) 18kg

(E) 24kg

7. Which number is halfway between 179 and 837? 7. Watter getal is halfpad tussen 179 en 837 ? 7. Leliphi inani othi xa ubala libe lelona liphakathi ukusukelo kwi 179 ukuya kuma 837 ?
- (A) 509 (B) 508 (C) 503 (D) 458 (E) 453

8. If you filled in the missing numbers on the last line of this triangle, what would they be ? 8. As jy die weggelaate syfers in die laaste lyn van die driehoek invul, wat sal hulle wees? 8. Ukuba ugqwalisa ngamanani kumgca ongezantsi walo nxantathu, ayakuba ngawaphi ?



- (A) 1, 6, 15, 20, 15, 6, 1 (B) 1, 6, 15, 20, 20, 15, 6, 1 (C) 6, 15, 20, 20, 15, 6 (D) 1, 6, 6, 20, 20, 6, 6, 1 (E) 1, 6, 8, 20, 20, 8, 6, 1

9. Allie painted the following word on the window of his corner Café. Viewed from the other side of the window, how would it look ? 9. Allie het die volgende woord op die venster van sy Hoek Kafee geverf. Hoe lyk dit gesien vanaf die ander kant van die venster ? 9. U Allie wabhala eligama liandelayo kwifestile ekwivenkile yakhe. Ukuba eli gama lijongelwa ngaphakathi evenkileni, libonakala linjani?

sweetz

- (A) stweetz (B) sweets (C) ?MGG†S (D) stəəwz (E) sweetz

10. In 10 years' time, the combined ages of 4 sisters will be 100. What will the combined ages be in 5 years time?

- (A) 50 (B) 60

10. Oor 10 jaar sal die gesamentlike ouderdom van 4 susters 100 wees. Wat sal hulle gesamentlike ouderdom oor 5 jaar wees?

- (C) 80 (D) 25

10. Kwiminyaka eli 10 ezayo isiphumo seminyaka yobudala sodade aba 4 siyakuba li 100. Ingaba kwiminyaka emihlanu ezayo isiphumo seminyaka yabo yobudala siya kuba ngubani ?

- (E) 15

11. Refer to the previous question. What are their combined ages at the moment ?

- (A) 90 (B) 10

11. Verwys na die vorige vraag. Wat is hulle gesamentlike ouderdom op die oomblik ?

- (C) 40 (D) 60

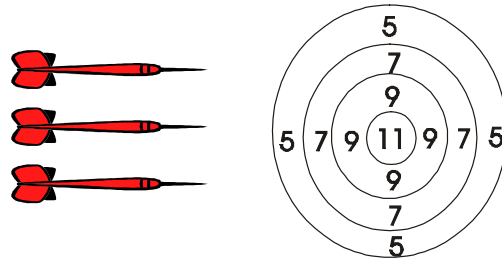
11. Jonga kumbuzo ongasentla. Ingaba isiphumo seminyaka yabo yobudala singakanani ngoku ?

- (E) 15

12. On this dartboard you can score 3, 5, 7, 9 or 11 with each dart. A boy hits the board with three darts. Which of the following total scores is impossible to obtain ?

12. Op hierdie veerpyltjie-teiken kan jy tellings van 3, 5, 7, 9 of 11 met elke pyltjie behaal. 'n Seun tref die teiken met 3 pyltjies. Watter van hierdie totale tellings is onmoontlik?

12. Umntu angaskora isi 3, 5, 7, 9 okanye u 11 kwiqonga lwedathi eliboniswe ngasezantsi., ngedati nganye. Inkwenkwana ithi igibisele kweli qonga ngeedathi ezi 3. Sesiphi isikoro esingenakufumaneka kwezi zilandelayo ?



- (A) 21 (B) 33 (C) 25 (D) 22 (E) 23

13. A word list contains 1024 words, with 42 words per page. How many pages are needed for the list ?

- (A) 24 (B) 25

13. 'n Woordelys bestaan uit 1024 woorde, met 42 woorde per bladsy. Hoeveel bladsye is nodig vir die lys ?

- (C) 24,38 (D) 43008

13. Uluhlu lwamagama lunamagama ali 1024, ingamagama angama 42 kwiphepha ngalinye. Mangaphi amaphepha afunekayo kolu luhlu ?

- (E) 982

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14. A cricket and a flea decide to hop up a flight of 12 stairs. The flea takes 2 steps in one hop and the cricket takes 3 steps in one hop. On how many steps will both the flea and cricket land ?
- (A) 1                      (B) 2                      (C) 3                      (D) 4                      (E) 6
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15. Refer to the previous question. On how many steps will neither of them land ?
- (A) 0                      (B) 2                      (C) 3                      (D) 4                      (E) 6
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16. A drink and a chocolate cost R2 together. The drink costs 50c more than the chocolate. How much does the chocolate cost on its own ?
- (A) R0,50                      (B) R0,75                      (C) R1,50                      (D) R2,00                      (E) R2,50
- 
17. The mass of a container with sugar is 13 kg. After one third of the sugar has been used, the mass of the container with the rest of the sugar is 9 kg. What is the mass of the empty container?
- (A) 1 kg                      (B) 4 kg                      (C) 10 kg                      (D) 19 kg                      (E) 21 kg
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|---|---|---|
| <p>18. 3 Boys plant 10 plants in 10 minutes. How many boys plant 60 plants in 60 minutes?</p> | <p>18. 3 seuns plant 10 plante in 10 minute. Hoeveel seuns plant 60 plante in 60 minute ?</p> | <p>18. Amakhwenkwe ama 3 atyale I 10 lezityalo kwimizuzu eli 10. Mangaphi amakhwenkwe anokutyala izityalo ezingama 60 ngemizuzu engama 60 ?</p> |
| (A) 20  | (B) 18  | (C) 12  |
| (D) 60  | (E) 3   |   |
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- |  |   |  |
|--|---|--|
| <p>19. My brother has only 1c, 5c and 20c coins in his pocket. He has the same number of each kind of coin. Which cannot be the amount of money in his pocket?</p> | <p>19. My broer het net 1c, 5c en 20c muntstukke in sy sak. Hy het ewe veel van elke sort muntstuk. Wat kan nie die bedrag geld in sy sak wees nie?</p> | <p>19. Umntakwethu wayenemali engamagaqa ayi 1c, 5c kunye nama 20c kwipokotho yakhe. Ukuba unenani elilinganayo lodid ngalunye lalamagaqa, yeyiphi kwezimali zibonisiweyo engenakuba sepokothweni yakhe?</p> |
| (A) R0,52  | (B) R0,78   | (C) R1,02  |
| (D) R2,60  | (E) R1,56   |  |
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- |   |  |  |
|---|--|--|
| <p>20. The average of eleven numbers is 8. If a twelfth number is added to these numbers, the average of all twelve numbers is now 11. What is the twelfth number added ?</p> | <p>20. Die gemiddelde van elf getalle is 8. As 'n twaalfde getal by hierdie getalle getel word, is die gemiddelde van al twaalf getalle nou 11. Wat is die twaalfde getal wat bygetel is ?</p> | <p>20. Iaverage yamanani alishumi elinanye sisi 8. Ukuba kudityaniswe elinye inani kula manani I average yalamanani alishumi elinesibini iba ngu 11. Lingubani eli nani le shumi elinambini lithe ladityaniswa ?</p> |
| (A) 11  | (B) 12   | (C) 33   |
| (D) 44  | (E) 55   |  |
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- |   |   |   |
|---|---|---|
| <p>Bonus. Siva is shorter than Temba. Eby is taller than Ram and Temba. Siva is shorter than Ram but taller than Oscar. Who is the shortest of them all ?</p> | <p>Bonus. Siva is korter as Temba. Eby is langer as Ram en Temba. Siva is korter as Ram, maar langer as Oscar. Wie is die kortste van hulle almal ?</p> | <p>IBhonasi: Usiva mfutshane kuno Themba. Ueby mde kuno Ram no Themba. Usiva mfutshane kuno Ram kodwa mde kuno Oscar. Ngowuphi oyena mfutshane kubo bonke ?</p> |
| (A) Oscar   | (B) Siva  | (C) Ram   |
| (D) Eby   | (E) Temba   |   |
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