

SA Mathematics Challenge 2014

GRADE 4 FINAL ROUND

30 JULY 2014

NOTE:

- Answer the questions according to the instructions on the answer sheet.
- You may use a calculator.
- The questions test insight. Complex calculations will therefore not be necessary.
- We hope you enjoy it!

SA Wiskunde-uitdaging 2014

GRAAD 4 FINALE RONDE

30 JULIE 2014

LET OP:

- Beantwoord die vrae volgens die instruksies op die antwoordblad.
- Jy mag 'n sakrekenaar gebruik.
- Die vrae toets insig. Omslagtige berekening is dus onnodig en tydrowend.
- Ons hoop jy geniet dit!

1. At a party each child gets $\frac{1}{3}$ of a pizza. There were 12 pizzas altogether. How many children were at the party?

(A) 4

(B) 36

(C) 48

(D) 24

(E) 12



2. This analogue watch shows the time after sunset on a particular day. What will a digital watch show for the same time?

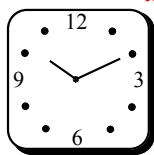
(A) 10:02

(B) 10:10

(C) 10:12

(D) 22:02

(E) 22:10



3. In this alpha puzzle, each letter stands for a unique digit so that the number sentence is true. What is the value of W?

$$W+O = O F$$



3. In hierdie alfa-raaisel staan elke letter vir 'n unieke syfer sodat die getalsin waar is. Wat is die waarde van W?

(A) 9

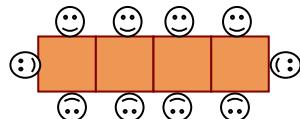
(B) 8

(C) 7

(D) 6

(E) 5

4. For your birthday party, you make one long table by joining a number of small tables as shown. Each small table can seat two persons, plus one at each end of the long table. How many people can sit at 20 small tables?



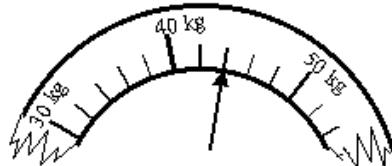
4. Vir jou verjaardagpartyjie maak jy een lang tafel deur 'n aantal klein tafeltjies teen mekaar te stoot soos getoon. By elke klein tafeltjie kan twee persone sit, plus een aan elke kop van die lang tafel. Hoeveel mense kan by 20 klein tafeltjies sit?



- (A) 40 (B) 42 (C) 20 (D) 22 (E) 46

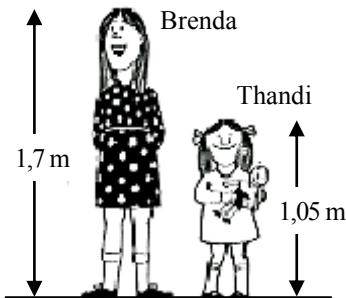
5. Which number is exactly halfway between 64 and 96?
 (A) 79 (B) 81 (C) 82 (D) 80 (E) 78

6. What mass is indicated on the scale?



- (A) 42 kg (B) 40,2 kg (C) 44 kg (D) 40,4 kg (E) 47 kg

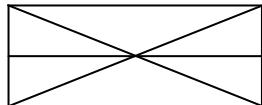
7. How much taller is Brenda than Thandi?



7. Hoeveel is Brenda langer as Thandi?

- (A) 65 m (B) 65 cm (C) 65 mm (D) 1,8 m (E) 1,65 m

8. How many triangles are there all together in this figure? 8. Hoeveel driehoekte is daar altesaam in hierdie figuur?



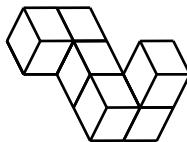
- (A) 8 (B) 10 (C) 12 (D) 14 (E) 16

9. Zinkle has 15 marbles less than Zuki. Together they have 95 marbles. How many marbles does Zuki have?

- (A) 80 (B) 40 (C) 55 (D) 50 (E) 110

9. Zinkle het 15 albasters minder as Zuki. Saam het hulle 95 albasters. Hoeveel albasters het Zuki?

10. This object is made by gluing together six wooden cubes. If you now paint the object, how many faces must you paint?



(A) 30 (B) 27 (C) 26 (D) 25 (E) 24

11. Pete adds three different two-digit numbers (e.g. 58). What is the highest possible total?

(A) 294 (B) 297 (C) 267 (D) 579 (E) None of these
Nie een hiervan nie

12. At school A a bell rings every half hour and at school B a bell rings every 35 minutes. If the two bells ring together at 08:00, when will they ring together again?

(A) 10:30 (B) 10:55 (C) 11:30 (D) 12:00 (E) 12:05

13. You have three 10c coins, two 5c coins and two 20c coins. In how many different ways can you give a person 35c?

(A) 1 (B) 2 (C) 3 (D) 4 (E) 5

14. 102 marbles are divided among 7 boys. How many more marbles are still needed so that each boy will receive the same number of marbles and there are none left over?

(A) 1 (B) 2 (C) 3 (D) 4 (E) 5

15. The sketch shows a carpet on a tile floor. What fraction of the floor is *not* covered by the carpet?

11. Pete tel drie verskillende twee-syfergetalle (bv. 58) op. Wat is die grootste moontlike totaal?

12. By skool A lui 'n klok elke half uur en by skool B lui 'n klok elke 35 minute. As die twee klokke gelyktydig om 08:00 lui, wanneer sal hulle weer gelyktydig lui?

(D) 12:00 (E) 12:05

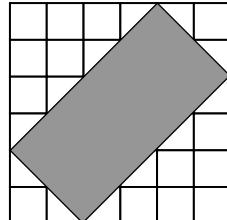
13. Jy het drie 10c muntstukke, twee 5c muntstukke en twee 20c muntstukke. Op hoeveel verskillende maniere kan jy 'n persoon 35c gee?

(D) 4 (E) 5

14. 102 albasters word tussen 7 seuns verdeel. Hoeveel albasters is nog nodig sodat elke seun dieselfde getal albasters sal hê en daar niks sal oorbly nie?

(D) 4 (E) 5

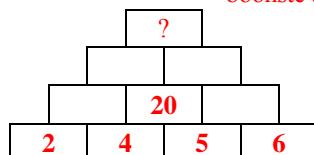
15. Die skets toon 'n mat op 'n blokkiesvloer. Watter breuk van die vloer word *nie* deur die mat bedek nie?



(A) $\frac{16}{36}$ (B) $\frac{5}{9}$ (C) $\frac{11}{36}$ (D) $\frac{22}{30}$ (E) $\frac{22}{36}$

16. In this number wall you multiply the two numbers next to each other and write the product in the brick directly above the two numbers e.g. $4 \times 5 = 20$. Which number will be written in the top brick?

16. In hierdie getal-muur vermenigvuldig jy die twee getalle langs mekaar en skryf die produk in die blok direk bo die twee getalle bv. $4 \times 5 = 20$. Watter getal sal in die boonste blok geskryf word?



(A) 960 (B) 9 600 (C) 960 000 (D) 96 (E) 96 000

17. Which fraction is between $\frac{1}{5}$ and $\frac{1}{4}$?

(A) $\frac{1}{3}$

(B) $\frac{9}{40}$

(C) $\frac{3}{20}$

17. Watter breuk is tussen $\frac{1}{5}$ en $\frac{1}{4}$?

(D) $\frac{1}{6}$

(E) Not one of these
Nie een hiervan nie

18. In how many different ways can the three people be arranged in a line next to each other for the photograph?

18. Op hoeveel verskillende maniere kan die drie mense in 'n lyn langs mekaar gerangskik word vir die foto?



(A) 3

(B) 4

(C) 5

(D) 6

(E) None of these
Nie een hiervan nie

19. In Townville the park is 3 km west of the school. The library is 1 km west of the church. The church is 4 km east of the school. How far is the library from the park?

(A) 6 km

(B) 4 km

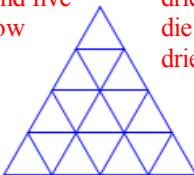
(C) 5 km

19. In Townville is die park 3 km wes van die skool. Die biblioteek is 1 km wes van die kerk. Die kerk is 4 km oos van die skool. Hoe ver is die biblioteek vanaf die park?

(D) 7 km

(E) 8 km

20. This big triangle has four rows. There is one small triangle in the first row, three in the second row and five in the third row. If such a triangle has 50 rows, how many small triangles are there in the 50th row?



(A) 99

(B) 101

(C) 51

(D) 151

(E) 150

20. Die groot driehoek het vier rye. Daar is een klein driehoekie in die eerste ry, drie in die tweede ry en vyf in die derde ry. As so 'n driehoek 50 rye het, hoeveel driehoekies is in die 50ste ry?