

Mathematics Challenge

GRADE 4 FINAL ROUND

11 OCTOBER 2006

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!

Wiskunde-uitdaging

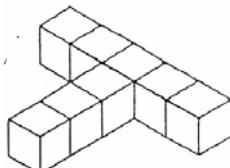
GRAAD 4 FINALE RONDE

11 OKTOBER 2006

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. Eight cubes are put together to build this T-shaped figure. The outside of the figure is completely painted. The eight cubes are then separated again. How many of the cubes now have exactly 4 painted faces?



- (A) 2 (B) 3 (C) 4 (D) 5 (E) 6

2. A movie on television is 2 hours 55 minutes long and ends at 16:45. At what time did it start?

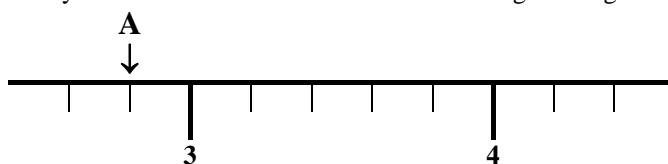
- (A) 14:50 (B) 14:10 (C) 13:50 (D) 13:10 (E) 14:25

3. A watch gains 30 seconds every six hours. How many minutes will it gain in a week?



- (A) 10 (B) 2 (C) 7 (D) 14 (E) 21

4. What is the number indicated by A on the ruler?



- (A) 2,9 (B) 2,8 (C) 2,95 (D) 2,6 (E) 2

5. R35 is shared equally amongst four children. How much does each child receive?

- (A) R8,25 (B) R8,50 (C) R8,75 (D) R8,00 (E) R8,57

1. Agt blokkies word gebruik om hierdie T-vorm te bou. Die buitekant van die vorm word daarna geverf. Die agt blokkies word dan weer losgemaak. Hoeveel van die blokkies het nou presies 4 geverfde kante?

2. 'n Film op televisie is 2 uur 55 minute lank en eindig om 16:45. Hoe laat het die film begin?

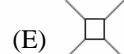
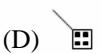
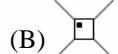
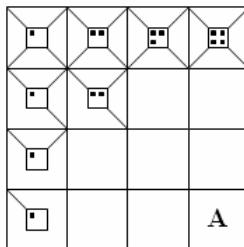
- (D) 13:10 (E) 14:25

3. 'n Horlosie wen 30 sekondes elke ses uur. Hoeveel minute sal dit in 'n week wen?

4. Wat is die getal aangedui deur A op die liniaal?

6. Which picture belongs at A?

6. Watter prentjie hoort by A?



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

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

(A) 80

(B) 40

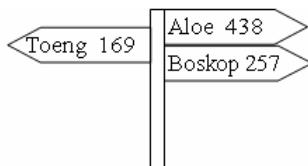
(C) 55

(D) 50

(E) 110

8. This road sign at a T-junction shows the distance, in kilometres, to three towns. What is the distance between Aloe and Boskop?

8. Hierdie padteken by 'n T-aansluiting gee die afstande, in kilometer, na drie dorpe. Wat is die afstand tussen Aloe en Boskop?



(A) 607 km

(B) 181 km

(C) 222 km

(D) 269 km

(E) 665 km

9. In the previous question: What is the distance between Aloe and Toeng?

9. In die vorige vraag: Wat is die afstand tussen Aloe en Toeng?

(A) 607 km

(B) 181 km

(C) 222 km

(D) 269 km

(E) 665 km

10. Thabo and Peter buy a case of 12 cooldrinks and pay R30 for it. Thabo takes 4 bottles and Peter takes the other 8. How much must Thabo pay for his share?

10. Thabo en Peter koop 'n kis met 12 koeldranken en betaal R30 daarvoor. Thabo neem 4 bottels en Peter neem die ander 8. Hoeveel moet Thabo vir sy deel betaal?

(A) R12

(B) R9

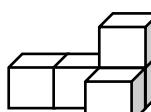
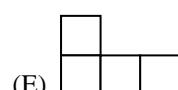
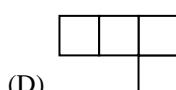
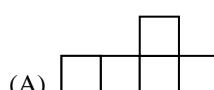
(C) R15

(D) R8

(E) R10

11. What will you see if you look at this block building directly from behind?

11. Wat sal jy sien as jy *presies* van agter na hierdie blokgebou kyk?



12. What is the next number in this pattern?

12. Wat is die volgende getal in hierdie getalpatroon?

6,8; 3,4; 1,7; ...

6,8; 3,4; 1,7; ...

(A) 0,85

(B) 8,5

(C) 1,35

(D) 0,9

(E) 0,535

13. Voyo has 24 marbles more than Bingo and Thandi has 24 less than Bingo. If Bingo has 71 marbles, how many do they have altogether?

13. Voya het 24 albasters meer as Bingo en Thandi het 24 minder as Bingo. As Bingo 71 albasters het, hoeveel het hulle altesaam?

(A) 211

(B) 213

(C) 215

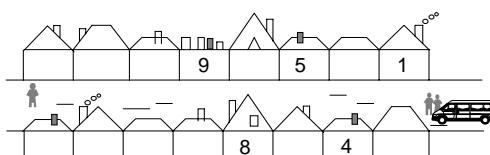
(D) 217

(E) 219

14. The sketch shows how houses are numbered in Albury Street.

Caroline lives at number 36
Con lives at number 37
Luke lives at number 38
Maria lives at number 39
Angelo lives at number 40

Who lives opposite Luke?



- (A) Caroline (B) Con (C) Maria (D) Angelo (E) Marc

15. A shop sells potatoes in big bags with 40 potatoes for R35,60. If they want to sell smaller bags of 15 potatoes for the same price, what should the price of the smaller bag be?

- (A) R10,68 (B) R13,35 (C) R17,80

16. If you begin with a certain number, multiply it by 3, then add 8, then divide by 2 and then subtract 6, you will get the original number back. What is the number?

- (A) 2 (B) 8 (C) 6

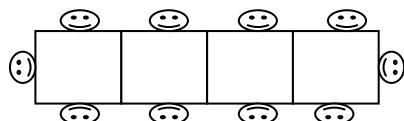
17. Bella uses $\frac{3}{4}$ of a metre of material to make a skirt. If she has 5 m of material, how many skirts can she make?

- (A) 7 (B) 6 (C) $6\frac{2}{3}$

18. A packet of viennas is shared equally amongst 15 children. If each child got $2\frac{1}{5}$ viennas, how many viennas were in the packet?

- (A) 33 (B) 35 (C) 30

19. You need seats for 58 people at your 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 small tables do you need?



- (A) 30 (B) 28 (C) 32 (D) 34 (E) 36

20. Arnold drove 10 km east, then 5 km north, then 3 km east, then 11 km south, then 13 km west. How far is he now from his starting place?

- (A) 11 km (B) 6 km (C) 3 km

14. Die skets toon hoe huise in Alburystraat genommer word.

Caroline woon in nommer 36
Con woon in nommer 37
Luke woon in nommer 38
Maria woon in nommer 39
Angelo woon in nommer 40

Wie woon direk oorkant Luke?

15. 'n Winkel verkoop groot sakke met 40 aartappels vir R35,60. As hulle kleiner sakkies met 15 aartappels teen dieselfde prys wil verkoop, wat moet die prys van die kleiner sakkie wees?

- (D) R16,40 (E) R15,65

16. As jy begin met 'n skere getal, dit vermeng-vuldig met 3, dan 8 bytel, dan deel deur 2 en dan 6 aftrek, sal jy die oorspronklike getal kry. Wat is die getal?

- (D) 5 (E) 4

17. Bella gebruik 'n $\frac{3}{4}$ meter material om 'n rok te maak. As sy 5 m material het, hoeveelrokke kan sy maak?

- (D) $3\frac{3}{4}$ (E) None of these
Nie een hiervan nie

18. 'n Pakkie worsies word gelykop tussen 15 kinders verdeel. As elke kind $2\frac{1}{5}$ worsies kry, hoeveel worsies was daar in die pakkie?

- (D) 30 (E) 32

19. Vir jou partyjie het jy sitplek vir 58 persone nodig. Jy maak 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 klein tafeltjies het jy nodig?

20. Arnold reis 10 km oos, toe 5 km noord, toe 3 km oos, toe 11 km suid en daarna 13 km wes. Hoe ver is hy nou van waar hy begin het?

- (D) 5 km (E) 10 km

21. Siva is shorter than Temba. Eby is taller than Ram and Temba. Siva is also shorter than Ram but taller than Oscar. Who is the shortest of them all?

- (A) Oscar (B) Siva (C) Temba

21. Siva is korter as Temba. Eby is langer as Ram en Temba. Siva is ook korter as Ram, maar langer as Oscar. Wie is die kortste van almal?

- (D) Ram (E) Eby

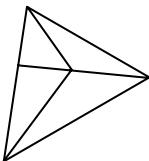
22. Which fraction is between $\frac{1}{4}$ and $\frac{1}{5}$?

- (A) $\frac{1}{3}$ (B) $\frac{9}{40}$ (C) $\frac{3}{20}$

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

- (D) $\frac{1}{6}$ (E) Not one of these
Nie een hiervan nie

23. Altogether, how many triangles are there in the figure below?



- (A) 9 (B) 6 (C) 7

23. Hoeveel driehoede is daar altesaam in die figuur hieronder?

- (D) 8 (E) Not one of these
Nie een hiervan nie

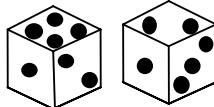
24. You have three 10c coins, two 5c coins and two 20c coins. In how many different ways can you give a person 35c?

- (A) 2 (B) 3 (C) 4

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

- (D) 5 (E) 6

25. If you roll two dice and add the two top numbers, how many different answers are possible?



- (A) 10 (B) 11 (C) 12

25. As jy twee dobbelstene rol en jy tel die twee boonste getalle op, hoeveel verskillende antwoorde is moontlik?

- (D) 21 (E) 36