

SA Mathematics Challenge 2013
GRADE 4 FIRST ROUND

SA Wiskunde-uitdaging 2013
Graad 4 Eerste Ronde

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!

LET OP:

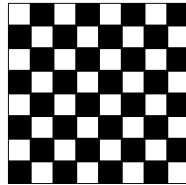
- Beantwoord die vrae volgens die instruksies op die antwoordblad.
- Jy mag 'n sakrekenaar gebruik.
- Die vrae toets insig. Omslagtige berekeninge is dus onnodig en tydrowend.
- Ons hoop jy geniet dit!

1. Which pair of dice does not fit with the others?



1. Watter paar dobbelstone pas nie by die ander nie?

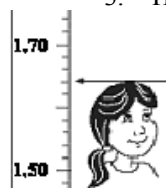
2. How many white tiles are there on an 8 by 8 chessboard?



- (A) 64 (B) 32 (C) 24 (D) 56 (E) 72

2. Hoeveel wit vierkante is daar op 'n 8 by 8 skaakbord?

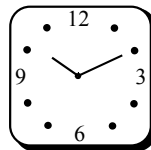
3. How tall is Jackie?



- (A) 1,64 m (B) 1,57 m (C) 1,73 m (D) 1,62 m (E) 1,67 m

3. How lank is Jackie?

4. 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

4. Hierdie analoog horlosie toon die tyd na sononder op 'n sekere dag. Wat sal 'n digitale horlosie vir dieselfde tyd toon?



5. R35 is shared equally amongst four children. How much does each child receive? 5. R35 word gelykop tussen vier kinders verdeel. Hoeveel ontvang elke kind?
- (A) R8,25 (B) R8,50 (C) R8,75 (D) R8,00 (E) R8,57

6. What number is the mouse covering?

17 31  59 73

6. Watter getal hou die muis toe?

- (A) 41 (B) 42 (C) 43 (D) 44 (E) 45

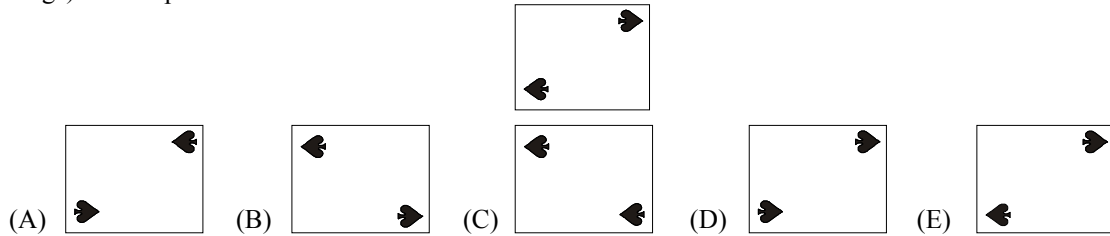
7. Nkosi has $\frac{3}{4}$ of a metre of string which he wants to cut into pieces, each $\frac{1}{8}$ of a metre long. How many pieces will he have?

7. Nkosi het $\frac{3}{4}$ meter tou wat hy in stukke wil sny, elkeen $\frac{1}{8}$ meter lank. Hoeveel stukke sal hy hê?

- (A) 3 (B) 7 (C) 4 (D) 6 (E) 8

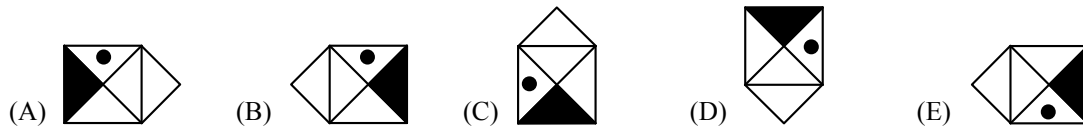
8. Which one of the cards below is a reflection (mirror-image) of the top card?

8. Watter kaart hieronder is 'n refleksie (spieëlbeeld) van die boonste kaart?



9. A figure is turned (but not flipped over) and shown below in different positions. Which figure does not fit with the others?

9. 'n Figuur word gedraai (maar nie omgekeer nie) en hieronder in verskillende posisies getoon. Watter figuur pas nie by die ander nie?



10. It takes Mlamli 20 minutes to cycle to school. He wants to be at school on Saturday morning 15 minutes before a soccer match which begins at 08:30. When must he set out?

10. Dit neem Mlamli 20 minute om per fiets skool toe te ry. Hy wil Saterdagoggend 15 minute voor 'n sokkerwedstryd, wat om 08:30 begin, by die skool wees. Hoe laat moet hy vertrek?

- (A) 08:10 (B) 07:55 (C) 08:25 (D) 08:50 (E) 08:00

11. How many 350 millilitre orange juice bottles can be filled from a container holding 35 litres of orange juice?

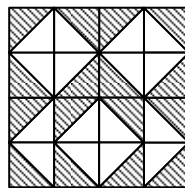


11. Hoeveel 350 milliliter lemoensap bottels kan gevul word uit 'n houer wat 35 liter lemoensap bevat?

- (A) 35 (B) 10 (C) 70 (D) 100 (E) 60

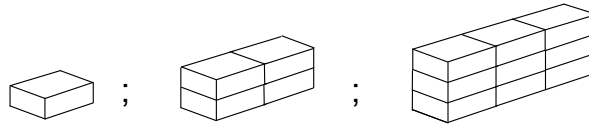
12. What fraction of the whole figure is shaded?

12. Watter breuk van die hele figuur hieronder is ingekleur?



- (A) $\frac{1}{2}$ (B) $\frac{10}{16}$ (C) $\frac{9}{16}$ (D) $\frac{7}{16}$ (E) $\frac{5}{32}$

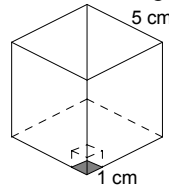
13. Blocks are stacked according to the pattern shown below. If this pattern is continued, how many blocks will be in the eighth stack?



- (A) 24 (B) 36 (C) 48 (D) 64 (E) 81

13. Blokkies word soos hieronder volgens 'n patroon gestapel. As hierdie patroon voortgesit word, hoeveel blokkies sal in die agtste stapel wees?

14. How many of the small cubes (side length 1 cm) fit exactly into the big cube (side length 5 cm)?



14. Hoeveel van die klein kubusse (sylenkte 1 cm) pas presies in die groot kubus (sylenkte 5 cm) in?

- (A) 5 (B) 15 (C) 25 (D) 150 (E) 125

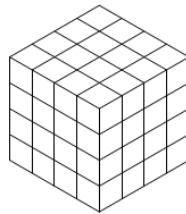
15. Halima is reading a book. Chapter 7 begins on page 246 and ends on page 274. How many pages are there in chapter 7?

15. Halima lees 'n boek. Hoofstuk 7 begin op bladsy 246 en eindig op bladsy 274. Hoeveel bladsye is daar in hoofstuk 7?

- (A) 274 (B) 28 (C) 15 (D) 29 (E) 30

16. A 4 by 4 by 4 cube is made of 1 cm cubes. The outside of the big cube is then painted red. How many of the small cubes will now have two sides painted red?

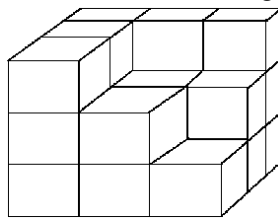
16. 'n 4 by 4 by 4 kubus word met klein 1 cm kubusse gemaak. Die buitekant van die groot kubus word dan rooi gevef. Hoeveel van die klein kubusse het nou twee kante wat rooi gevef is?



- (A) 8 (B) 12 (C) 24 (D) 28 (E) 16

17. How many small cubes were used to build this solid figure?

17. Hoeveel klein kubusse is gebruik om hierdie soliede figuur te bou?



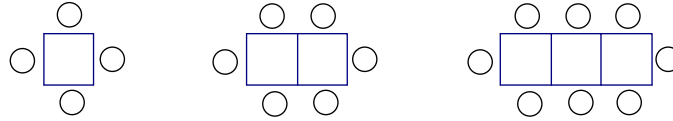
- (A) 27 (B) 22 (C) 17 (D) 9 (E) 21

18. Susan got into an elevator. The elevator first went down 4 floors, then up 5 floors and then down 6 floors. She was then on the third floor. On which floor did she get into the elevator?

18. Susan het in 'n hysbak geklim. Die hysbak het eers 4 vloere afgegaan, toe 5 vloere op en toe 6 vloere af. Sy was toe op die derde vloer. Op watter vloer het sy in die hysbak geklim?

- (A) 5 th (B) 6 th (C) 7 th (D) 8 th (E) 9 th

19. To seat people at his party Justin makes 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 be seated at 20 small tables?



- (A) 80 (B) 40 (C) 42 (D) 44 (E) 43

19. Vir sitplek by sy partytjie maak Justin 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?

20. In question 19: If Justin invites 58 people to his party, how many small tables does he need?

20. In vraag 19: As Justin 58 mense na sy partytjie nooi, hoeveel klein tafeltjies het hy nodig?

- (A) 28 (B) 29 (C) 30 (D) 31 (E) 32

21. You leave home at 10:00 travelling by car to Towntown, which is 200 km away. If you travel at a constant speed of 120 kilometres per hour, at what time will you arrive at Towntown?

21. Julle vertrek om 10:00 per motor van die huis af op pad na Towntown, wat 200 km ver is. As julle teen 'n konstante spoed van 120 kilometer per uur ry, hoe laat arriveer julle in Towntown?

- (A) 10:20 (B) 11:00 (C) 11:40 (D) 12:00 (E) 12:30

22. Manual must number the 100 room doors in a new hotel with plastic digits, from room 1 to room 100. How many digits 7 does he need?

22. Manual moet die 100 kamerdeure in 'n nuwe hotel met plastieksyfers nommer, van kamer 1 tot kamer 100. Hoeveel syfers 7 het hy nodig?

- (A) 18 (B) 19 (C) 20 (D) 10 (E) 11

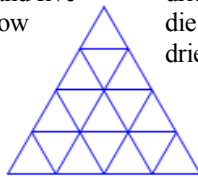
23. Monde's mother weighs 30 kg more than him. Together they weigh 114 kg. How much does Monde weigh?

23. Monde se ma weeg 30 kg meer as hy. Saam weeg hulle 114 kg. Hoeveel weeg Monde?

- (A) 84 kg (B) 30 kg (C) 72 kg (D) 42 kg (E) Not one of these
Nie een hiervan nie

24. 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?

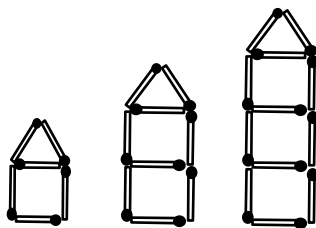
24. Die groot driehoek het vier rye. Daar is een klein driehoekie in die eerste ry, drie in die tweede ry en vyf in die derde ry. As so 'n driehoek 50 rye het, hoeveel driehoekies is in die 50ste ry?



- (A) 99 (B) 101 (C) 51 (D) 151 (E) 150

25. Thandi builds houses with matches, e.g. with nine matches she can build a house with two storeys. How many matches does she need to build a house with ten storeys?

25. Thandi bou huisies met vuurhoutjies, bv. met nege vuurhoutjies kan sy 'n huis met 2 verdiepings bou. Hoeveel vuurhoutjies gebruik sy om 'n huis met tien verdiepings te bou?



- (A) 30 (B) 32 (C) 33 (D) 36 (E) Not one of these
Nie een hiervan nie