

**SA Mathematics Challenge 2016**  
**GRADE 4 FIRST ROUND**

**SA Wiskunde-uitdaging 2016**  
**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!

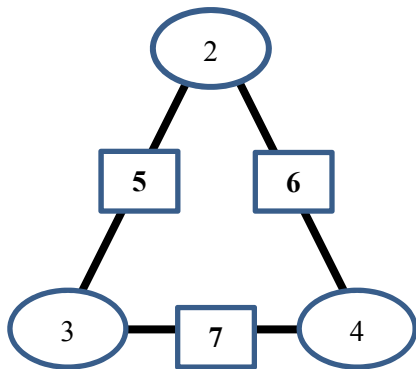
**LET OP:**

- 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. Mary is standing in a queue. There are 3 learners in front of her and 6 learners behind her. How many learners are standing in the queue?

- (A) 9                      (B) 3                      (C) 2                      (D) 10                      (E) 18

2. What is the missing number?

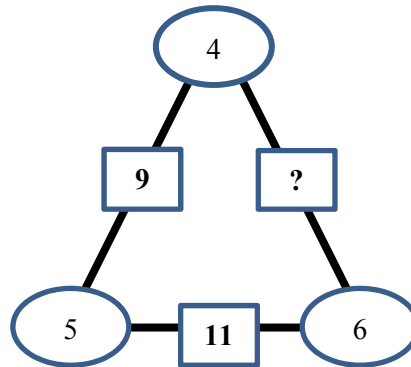


- (A) 14                      (B) 2                      (C) 10

1. Mary staan in 'n tou. Daar is 3 leerders voor haar en 6 leerders agter haar. Hoeveel leerders staan in die tou?

- (D) 10                      (E) 18

2. Wat is die ontbrekende getal?



- (D) 24                      (E) 35

3. Which of these numbers is divisible by 4 and 6?

- (A) 10                      (B) 2                      (C) 20

3. Watter van hierdie getalle is deelbaar deur 4 en 6?

- (D) 16                      (E) 24

4. What is the sum of the odd numbers between 2 and 8?

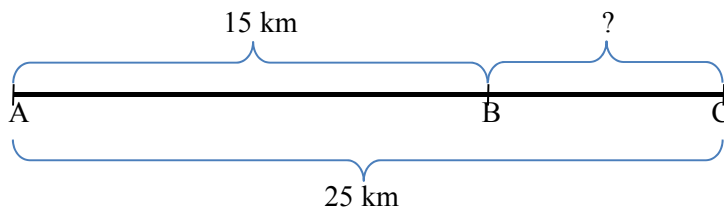
- (A) 10                      (B) 15                      (C) 6

4. Wat is die som van die onewe getalle tussen 2 en 8?

- (D) 16                      (E) 4

5. What is the distance between B and C?

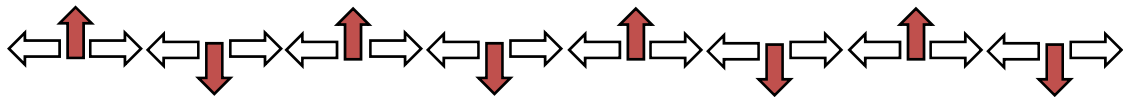
5. Wat is die afstand tussen B en C?



- (A) 40 km      (B) 15 km      (C) 10 km      (D) 25 km      (E) 30 km

6. What are the next three arrows in this pattern?

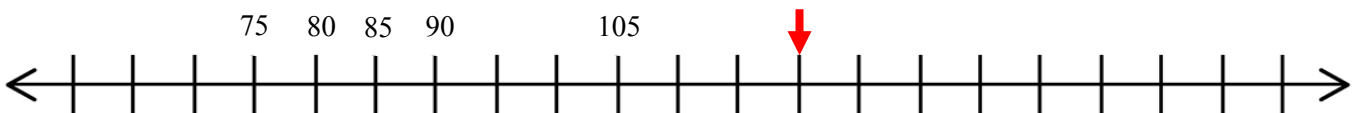
6. Wat is die volgende drie pyle in hierdie patroon?



- (A)      (B)      (C)      (D)      (E)

7. What number is marked by the arrow?

7. Watter getal word deur die pyl aangedui?



- (A) 100      (B) 105      (C) 120      (D) 125      (E) 130

8. Faiza ate  $\frac{1}{4}$  of a chocolate slab and Shireen ate  $\frac{1}{4}$  of the same slab. What fraction of the slab was not eaten?

8. Faiza eet  $\frac{1}{4}$  van 'n blok sjokolade en Shireen eet  $\frac{1}{4}$  van dieselfde blok. Watter breuk van die blok bly oor?

- (A)  $\frac{2}{8}$       (B)  $\frac{6}{8}$       (C)  $\frac{1}{2}$       (D)  $\frac{3}{4}$       (E)  $\frac{1}{4}$

9. Alice has to place four different figures in the table so that each figure appears exactly once in each row and each column. What figure should Alice use in the place of the question mark?

9. Alice moet vier verskillende figure in die tabel hieronder plaas sodat elke figuur presies een keer voorkom in elke ry en elke kolom. Watter figuur moet Alice gebruik in die plek van die vraagteken?

			?

- (A)      (B)      (C)      (D)      (E)

10. What is the missing number in this number pattern?

1, 2, 4, 7, 11, \_\_\_\_, 22

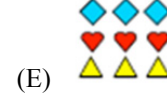
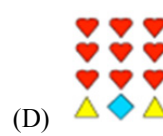
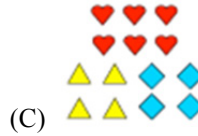
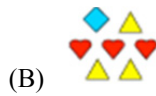
(A) 10                      (B) 8                      (C) 9

10. Wat is die ontbrekende getal in hierdie getalpatroon?

1, 2, 4, 7, 11, \_\_\_\_, 22

(D) 16                      (E) 18

11. In one of these pictures exactly three quarters ( $\frac{3}{4}$ ) of all the objects are hearts. Which one is it?



11. In een van hierdie prente is presies driekwart ( $\frac{3}{4}$ ) van alle voorwerpe harte. Watter een is dit?

12. Alan, Brenda and Carly are walking up a flight of stairs. Alan climbs the stairs one step at a time. Brenda climbs two steps at a time. Carly climbs three steps at a time. What is the first step number that they will all step on?

(A) 3                      (B) 4                      (C) 5                      (D) 6                      (E) 7

12. Alan, Brenda en Carly klim 'n stel trappe. Alan klim die trappe een op 'n slag. Brenda klim twee trappe op 'n slag. Carly klim drie trappe op 'n slag. Wat is die eerste trapnommer waarop hulle almal sal trap?

13. Lindiwe is making this growing pattern of pictures with matches. How many matches are there in *Picture 10*?



Picture 1



Picture 2



Picture 3

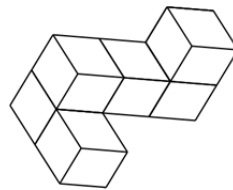


Picture 4

(A) 32                      (B) 17                      (C) 50                      (D) 18                      (E) 25

13. Lindiwe bou hierdie groeiende patroon met vuurhoutjies. Hoeveel vuurhoutjies is daar in *Figuur 10*?

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



(A) 26                      (B) 25                      (C) 13                      (D) 5                      (E) 6

14. Hierdie voorwerp word gemaak deur ses houtblokkies aan mekaar te lym. As jy nou die voorwerp verf, hoeveel syvlakke moet jy verf?

15. The desks in a classroom are arranged in straight rows with the same number of desks in each row. Sarah sits in the third row from the front and the second row from the back. She is also second from the left and fourth from the right. How many desks are in the classroom?

(A) 25                      (B) 15                      (C) 20                      (D) 30                      (E) 35

15. Die banke in 'n klaskamer staan in ewe lang reguit rye. Sarah sit in die derde ry van voor af en in die tweede ry van agter af. Sy is ook tweede van links en vierde van regs. Hoeveel banke is daar in die klaskamer?

16. What is the next figure in this continuing pattern?

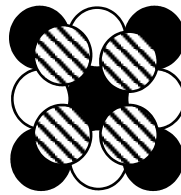
16. Wat is die volgende figuur in hierdie patroon?



- (A) (B) (C) (D) (E)

17. Mary had equal numbers of white, black and striped counters. She used some of the counters to make the pile below. None of the counters are completely hidden. She still has five counters which are not in the pile. How many black counters did she have in total?

17. Mary het ewe veel wit, swart en gestreepte tellers. Sy maak die hoop hieronder met sommige van die tellers. Al die tellers in die hoop is sigbaar. Sy het nog vyf tellers oor wat nie in die hoop is nie. Hoeveel swart tellers het sy altesaam?



- (A) 4 (B) 5 (C) 6 (D) 24 (E) 18

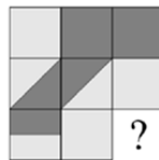
18. John and his three friends often meet in a restaurant. John always sits at the same spot at the table, while the friends sit in different positions. In how many different ways can his three friends sit around the table?

18. John en sy drie vriende besoek dikwels 'n restaurant. John sit altyd op dieselfde plek aan die tafel, terwyl die vriende plekke wissel. Op hoeveel verskillende maniere kan sy drie vriende om die tafel sit?

- (A) 3 (B) 4 (C) 6 (D) 24 (E) 25

19. Which tile must be added to this picture so that the total light area is equal to the total dark area?

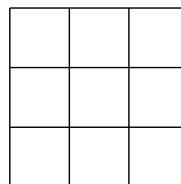
19. Watter teël moet by hierdie prentjie gevoeg word sodat die totale ligte oppervlakte gelyk is aan die totale donker oppervlakte?



- (A) (B) (C) (D) (E)

20. How many squares, of any size, are there in this figure?

20. Hoeveel vierkante, van enige grootte, is in hierdie figuur?



- (A) 9 (B) 10 (C) 13 (D) 14 (E) 15