

SA Mathematics Challenge 2015

GRADE 5 FIRST ROUND

SA Wiskunde-uitdaging 2015

Graad 5 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. Thandi went to the store to buy some groceries. She paid for the groceries with a R50 note, and received R18,65 back in change. How much did the groceries cost?

- (A) R31,35 (B) R32,35 (C) R18,65

1. Thandi het gaan kruideniersware koop. Sy het met 'n R50 noot betaal en R18,65 kleingeld ontvang. Hoeveel het die kruideniersware gekos?

- (D) R31,65 (E) None of these
Nie een hiervan nie

2. $145 \times 8 = 145 \times 4 \times \triangle$

What is the missing number \triangle ?

- (A) 1160 (B) 580 (C) 6

2. $145 \times 8 = 145 \times 4 \times \triangle$

Wat is die ontbrekende getal \triangle ?

- (D) 4 (E) 2

3. How many whole numbers between 1 and 60 have the digit 5?

- (A) 6 (B) 14 (C) 10

3. Hoeveel heelgetalle van 1 tot 60 het die syfer 5?

- (D) 15 (E) 16

4. When a number is divided by 3 or 4, it leaves a remainder of 1. What is the number if it is between 20 and 30?

- (A) 13 (B) 24 (C) 25

4. As 'n getal gedeel word deur 3 of 4, laat dit 'n res van 1. Wat is die getal as dit tussen 20 en 30 is?

- (D) 37 (E) 21

5. Ezra reads his book from the top of page 189 to the bottom of page 205. How many pages has he read?

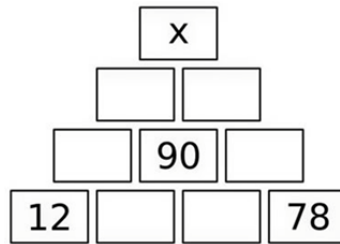
5. Ezra lees sy boek van bo-aan bladsy 189 tot by die onderkant van bladsy 205. Hoeveel bladsye het hy gelees?



- A) 84 (B) 16 (C) 116 (D) 15 (E) 17

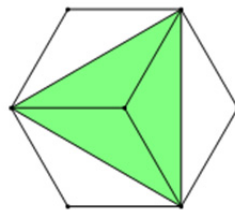


6. In the sketch, the number in each box is obtained by adding the numbers in the two boxes immediately underneath it. What number is X?



- (A) 78 (B) 360 (C) 102 (D) 168 (E) One cannot say
Mens kan nie sê nie

7. What fraction of this regular hexagon is shaded?



7. Watter breuk van hierdie reëlmatige seshoek is verdonker?

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

8. If $\text{☾} + \text{☾} + \text{☾} = 21$

And $\text{☾} + \text{♥} + \text{♥} + \text{♥} = 22$

Then $\text{☾} + \text{♥} = ?$

- (A) 8 (B) 15 (C) 10 (D) 12 (E) 18

8. As $\text{☾} + \text{☾} + \text{☾} = 21$

En $\text{☾} + \text{♥} + \text{♥} + \text{♥} = 22$

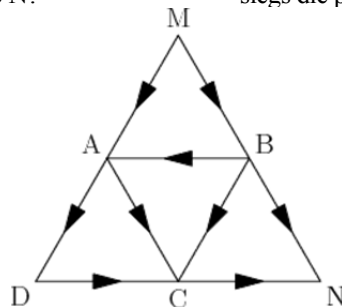
Dan is $\text{☾} + \text{♥} = ?$

9. Jason divided a number by 6 instead of multiplying, obtaining the answer 15. What should the correct answer be?

- (A) 90 (B) 180 (C) 360 (D) 540 (E) 100

9. Jason het 'n getal deur 6 gedeel in plaas daarvan om te vermenigvuldig en kry toe 15 as antwoord. Wat is die korrekte antwoord?

10. Using only the paths and the directions shown, how many different routes are there from M to N?



10. Hoeveel verskillende roetes is daar van M na N? Gebruik slegs die paaie en die rigtings soos in die skets getoon.

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

11. M is a whole number which makes this sentence true:

$$M + M = M \times M$$

How many such whole numbers are there?

- (A) 0 (B) 1 (C) 2

11. M is 'n heelgetal wat hierdie sin waar maak:

$$M + M = M \times M$$

Hoeveel sulke getalle is daar?

- (D) 3 (E) 4

12. How many bananas are needed to make the third scale below balance?



- (A) 1 (B) 2 (C) 3 (D) 4 (E) 12

13. How many hours is it from Monday 19:00 to Wednesday 04:00?

- (A) 15 (B) 33 (C) 29

13. Hoeveel uur is dit vanaf Monday 19:00 tot Woensdag 04:00?

- (D) 35 (E) 45

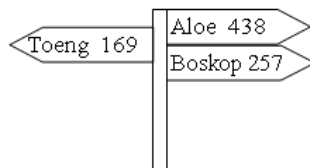
14. Naomi flips three coins. In how many ways can she get two heads and one tail?



- (A) 1 (B) 2 (C) 3 (D) 4 (E) 8

14. Naomi skiet driemuntstukke op. Op hoeveel verskillende maniere kan sy twee koppe (kruise) en een stert (munt) kry?

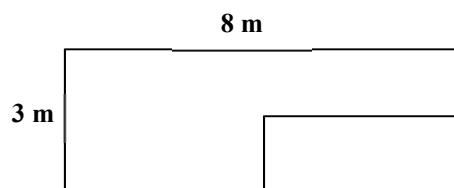
15. This road sign at a T-junction shows the distance, in kilometres, to three towns. What is the distance between Aloe and Boskop?



- (A) 607 km (B) 181 km (C) 222 km (D) 269 km (E) 665 km

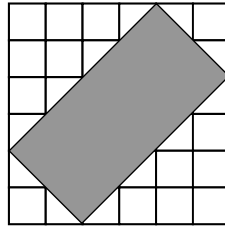
15. Hierdie padteken by 'n T-aansluiting gee die afstande, in kilometer, na drie dorpe. Wat is die afstand tussen Aloe en Boskop?

16. An ant walks once around the rectangular figure below, all along the lines. How far did the ant walk?



- (A) 11 m (B) 19 m (C) 22 m (D) 24 m (E) Not enough information
Nie genoeg inligting nie

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



17. 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) $\frac{22}{36}$

18. 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?

18. 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?

- (A) 6 km (B) 4 km (C) 5 km (D) 7 km (E) 8 km

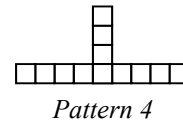
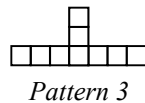
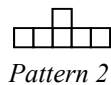
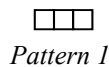
19. I multiplied two consecutive numbers (e.g. 4 and 5) on my calculator and got the answer 702. What is the sum of the two numbers?

19. Ek het twee opeenvolgende getalle (bv. 4 en 5) op my sakrekenaar vermenigvuldig en die antwoord is 702. Wat is die som van die twee getalle?

- (A) 42 (B) 49 (C) 53 (D) 65 (E) 51

20. If the pattern below is continued, how many squares will *Pattern 100* have?

20. As die patroon hieronder voortgaan, hoeveel vierkantjies sal in *Patroon 100* wees?



- (A) 301 (B) 302 (C) 300 (D) 298 (E) 299