SA Mathematics Challenge 2014
GRADE 4 FIRST ROUND

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 Eerste Ronde

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!

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1. What number is 300 less than 5 698?

   (A) 5 000 (B) 5 398 (C) 5 668

1. Watter getal is 300 minder as 5 698?

   (D) 2 698 (E) 5 695

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2. A taxi has 13 people on board. Three people are dropped off at the first stop and six people get on. At the second stop five are dropped off and two get on. At the third stop 3 people get off. How many people are now on board the taxi?

   (A) 13 (B) 10 (C) 11 (D) 16 (E) 3

2. 'n Taxi het 13 mense aanboord. Drie mense klim by die eerste halte (stop) af, en ses mense klim op. By die tweede halte klim vyf mense af en twee klim op. By die derde halte klim drie mense af. Hoeveel mense is nou aan boord die taxi?

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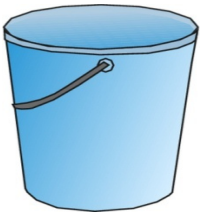
3. You have 20 litres of water in a bucket. How many 500 mL bottles will you be able to fill from the 20 litres of water?



   (A) 40 (B) 25 (C) 20 (D) 480 (E) 520

3. Jy het 20 liter water in 'n emmer. Hoeveel 500 mL bottels kan jy volmaak uit die 20 liter water?

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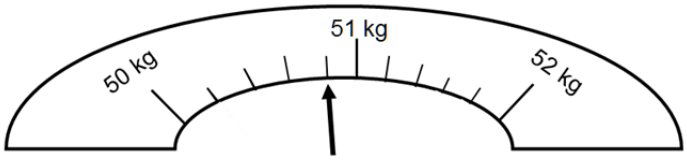
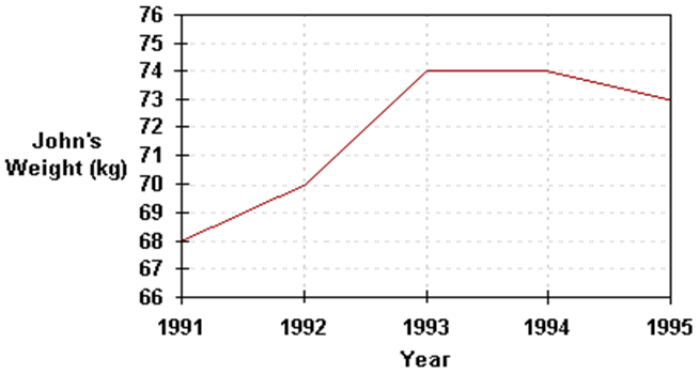
4. What mass is indicated on the scale below?



(A) 50,4 kg (B) 50,5 kg (C) 50,8 kg (D) 50,75 kg (E) 50,9 kg

4. Watter massa word op die skaal hieronder aangedui?

5. In the graph below, by how much did John's weight increase from 1991 to 1995?



(A) 74 kg (B) 2 kg (C) 5 kg (D) 6 kg (E) 68 kg

5. In die grafiek hieronder, met hoeveel het John se gewig toegeneem van 1991 tot 1995?

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

230; 220; 205; ____; 160

(A) 200 (B) 185 (C) 180 (D) 190 (E) 195

6. Wat is die ontbrekende getal in hierdie getalpatroon?

230; 220; 205; ____; 160

7. Five tennis balls cost R60. How much will I pay for 3 tennis balls?

(A) R40 (B) R12 (C) R30 (D) R45 (E) R36

7. Vyf tennisballe kos R60. Hoeveel sal ek betaal vir 3 tennisballe?

8. Tom has R900. He buys a bicycle for R623, a pair of trousers for R275 and would like to buy shoes for R312. How much more money does he need to buy the shoes?

(A) R312 (B) R310 (C) R212 (D) R210 (E) R121

8. Tom het R900. Hy koop 'n fiets vir R623 en 'n broek vir R275. Hy wil ook graag skoene koop vir R312. Hoeveel geld kort hy om die skoene te kan koop?

9. At the fruit market, Jeff must pack 785 oranges onto racks that can each hold 85 oranges. How many oranges will be left after filling the racks?

(A) 85 (B) 24 (C) 10 (D) 20 (E) 25

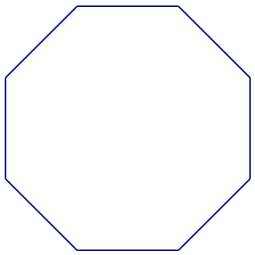
9. By die groentemark moet Jeff 785 lemoene uitpak op rakke wat elk 85 lemoene kan hou. Hoeveel lemoene bly daar oor nadat die rakke vol gepak is?

10. A car travels at a constant speed of 120 kilometres per hour for 30 minutes. What distance did the car travel?

(A) 3600 km (B) 150 km (C) 120 km (D) 15 km (E) 60 km

10. 'n Motor beweeg teen 'n konstante spoed van 120 kilometer per uur vir 30 minute. Watter afstand het die motor afgelê?

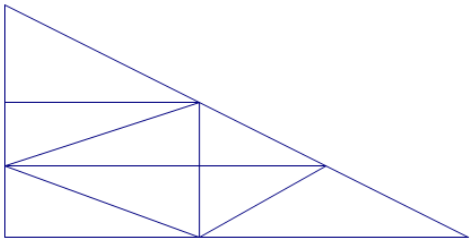
11. The regular octagon below has all side lengths equal and all angles have the same size. How many lines of symmetry does this regular octagon have?



(A) 4 (B) 8 (C) 2 (D) 10 (E) 6

11. Die reëlmatige agthoek hieronder se sye en hoeke is almal ewe groot. Hoeveel lyne van simmetrie het hierdie reëlmatige agthoek?

12. How many different triangles (of all sizes) are in this figure?



(A) 10 (B) 13 (C) 20 (D) 14 (E) 16

12. Hoeveel verskillende driehoeke (van alle groottes) is daar in hierdie figuur?

13. Which fraction is between $\frac{4}{5}$ and $\frac{19}{20}$?

(A) $\frac{3}{4}$ (B) $\frac{5}{6}$ (C) $\frac{3}{5}$ (D) $\frac{9}{10}$ (E) $\frac{23}{25}$

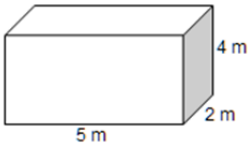
13. Watter breuk is tussen $\frac{4}{5}$ en $\frac{19}{20}$?

14. Samantha has these three number cards. She puts them next to each other to make 3-digit numbers, e.g. 247. How many different 3-digit numbers can she make with these cards?

(A) 3 (B) 4 (C) 6 (D) 12 (E) 7

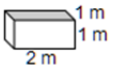
14. Samantha het hierdie drie kaarte. Sy plaas hulle langs mekaar om 3-syfer getalle te maak, byvoorbeeld 247. Hoeveel verskillende 3-syfer getalle kan sy met hierdie kaarte maak?

15. The back of a truck is shaped like a block of length 5 m, breadth 2 m and height 4 m. What is the maximum number of boxes of length 2 m, breadth 1 m and height 1 m that can be packed inside the back of the truck?

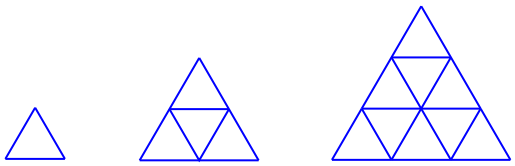


(A) 56 (B) 20 (C) 10 (D) 55 (E) 12

15. Die agterkant van ’n vragmotor is in die vorm van ’n blok met lengte 5 m, breedte 2 m en hoogte 4 m. Wat is die maksimum getal bokse van lengte 2 m, breeedte 1 m en hoogte 1 m wat in die vragmotor gepak kan word?



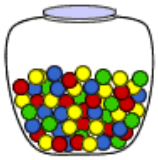
16. Brent builds the following shapes using plastic straws. How many straws will he need to build the fourth shape?



(A) 30 (B) 36 (C) 45 (D) 40 (E) 54

16. Brent bou die vorms hieronder met plastiek strooitjies. Hoeveel strooitjies benodig hy om die vierde vorm te bou?

17. There are seven yellow marbles and one red marble in a jar. What is the probability of randomly picking the red marble from the jar?



(A) $\frac{1}{7}$ (B) $\frac{7}{8}$ (C) $\frac{1}{8}$ (D) $\frac{6}{7}$ (E) $\frac{1}{2}$

17. Daar is sewe geel albasters en een rooi albaster in 'n houer. Wat is die waarskynlikheid om lukraak die rooi albaster in die houer te kies?

18. Jean has R50. He spends $\frac{2}{5}$ of it and then spends $\frac{1}{6}$ of what is left. How much money does Jean have left?

(A) R20 (B) R25 (C) R30 (D) R40 (E) R6

18. Jean het R50. Hy spandeer $\frac{2}{5}$ daarvan, en spandeer toe $\frac{1}{6}$ van wat oorgebly het. Hoeveel geld het Jean nou oor?

19. Aunt Anna is 42 years old. Cathy is five years younger than Brian, and Brian is half as old as Aunt Anna. How old is Cathy?

(A) 15 (B) 16 (C) 17 (D) 21 (E) 37

19. Tannie Anna is 42 jaar oud. Cathy is vyf jaar jonger as Brian, en Brian is die helfte so oud as Tannie Anna. Hoe oud is Cathy?

20. How many 3-digit numbers have all three digits odd, e.g. 135 and 739?

(A) 333 (B) 500 (C) 300 (D) 15 (E) 125

20. Hoeveel 3-syfer getalle is daar met al drie syfers onewe, byvoorbeeld 135 en 739?