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The 2002 Living Maths Olympiad Grade: 4

It's about the stuff in maths and the maths in stuff.

PLEASE NOTE:

- Answer the questions according to the instructions on the answer sheet.
- You may NOT use a calculator.
- We hope you enjoy it!

LET OP ASSEBLIEF:

- Beantwoord die vrae volgens die instruksies op die antwoordblad.
- Jy mag nie 'n sakrekenaar gebruik nie.
- Ons hoop jy geniet dit!

1. Find the next number in the sequence below.

3; 6; 10; 15; 21; ?

- (A) 24 (B) 25 (C) 26 (D) 27 (E) 28

1. Bepaal die volgende getal in die ry hieronder.

3; 6; 10; 15; 21; ?

2. How much does it cost to post a standard letter?



- (A) R5,20 (B) R2,30 (C) R1,50 (D) R7,50 (E) R0,80

2. Hoeveel kos dit om 'n standaard brief te pos?

3. Which number in place of # will make the number sentence true?

$$23 - 9 = \# - 23$$

- (A) 9 (B) 14 (C) 30 (D) 37 (E) 42

3. Watter getal moet in die plek van # gebruik word om die getalsin waar te maak?

$$23 - 9 = \# - 23$$

4. In the figure below, the sum of the three numbers in every row, column and diagonal is 18. What digit should replace Y ?

	Y	
11	6	
		10

- (A) 11 (B) 6 (C) 10 (D) 2 (E) 9

4. In die figuur hieronder, is die som van die drie getalle in elke ry, kolom en skuinslyn 18. Watter getal sal die plek van Y vervang?

5. If 10 Apples cost R8,00. What will 7 apples cost?

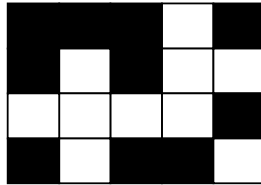
5. As 10 appels R8.00 kos. Wat sal 7 appels kos?



- (A) R80,00 (B) R70,00 (C) R5,60 (D) R7,50 (E) R6,50

6. What fraction is shaded in the picture below?

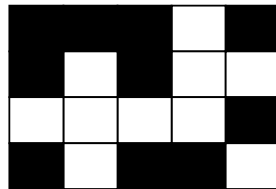
6. Watter breuk is verdonker in die figuur hieronder?



- (A) $\frac{1}{2}$ (B) $\frac{1}{3}$ (C) $\frac{2}{5}$ (D) $\frac{9}{20}$ (E) $\frac{10}{18}$

7. What fraction of the figure in question 6 is not shaded?

7. Watter breuk van die figuur in vraag 6 is nie verdonker nie?



- (A) $\frac{1}{2}$ (B) $\frac{2}{3}$ (C) $\frac{3}{5}$ (D) $\frac{11}{20}$ (E) $\frac{8}{18}$

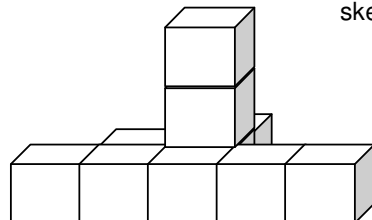
8. If John is the son of Peter. Then how is Peter related to John's father?

8. As John, Peter se seun is. Hoe is Peter dan aan John se pa verwant?

- (A) Brother (B) Father (C) Grandfather (D) Son (E) None of these
Broer Pa Oupa Seun Nie een van hierdie nie

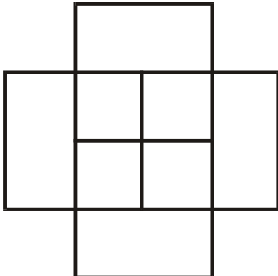
9. How many blocks were used to build this structure?

9. Hoeveel blokkies is gebruik om die struktuur in die skets hieronder te bou?



- (A) 9 (B) 10 (C) 11 (D) 12 (E) 13

<p>10. 6 ; 10 ; 14 ; 18 ; 22 ; . . . If the pattern is continued, which of these numbers will NOT appear?</p> <p>(A) 42 (B) 26 (C) 32 (D) 50 (E) 54</p>	<p>10. 6 ; 10 ; 14 ; 18 ; 22 ; . . . As die patroon voortgesit word, watter van hierdie getalle sal nie voorkom nie?</p> <p>(A) 42 (B) 26 (C) 32 (D) 50 (E) 54</p>
<p>11. I have the following in my pocket: one 50c coin, one 20c coin, one 10c coin and one 2c coin. Which of the following amounts can I NOT give someone without making change?</p> <p>(A) 32c (B) 42c (C) 52c (D) 62c (E) 72c</p>	<p>11. Ek het die volgende munstukke in my sak: een 50c stuk, een 20c stuk, een 10c stuk en een 2c stuk. Watter een van die volgende bedrae kan ek NIE aan iemand gee sonder om eers kleingeld te kry nie?</p> <p>(A) 32c (B) 42c (C) 52c (D) 62c (E) 72c</p>
<p>12. How many two-digit numbers contain <i>only</i> even digits?</p> <p>(A) 5 (B) 10 (C) 15 (D) 20 (E) 25</p>	<p>12. Hoeveel tweesyfergetalle bestaan net uit ewe syfers ?</p> <p>(A) 5 (B) 10 (C) 15 (D) 20 (E) 25</p>
<p>13. Mark Shuttleworth spent 20 million dollars to fly into space. Which number below describes the amount he paid in dollars?</p>	<p>13. Mark Shuttleworth het 20 miljoen dollar spandeer om na die ruimte te gaan. Watter getal hieronder beskryf die bedrag wat hy in dollars betaal het?</p>
<p>(A) \$20 000 (B) \$200 000 (C) \$2 000 000 (D) \$20 000 000 (E) \$20 000 000 000</p>	<p>(A) \$20 000 (B) \$200 000 (C) \$2 000 000 (D) \$20 000 000 (E) \$20 000 000 000</p>
<p>14. Don is building a house with his LEGO set. The set comes with 48 long, 59 medium and 80 small blocks. To build one house, Don needs 6 long, 8 medium and 9 short blocks. How many houses can Don build with his set?</p>	<p>14. Don bou 'n huis met sy LEGO-stel. Die stel het 48 lang, 59 medium en 80 klein blokkies. Om een huis te bou, gebruik Don 6 lang, 8 medium en 9 klein blokkies. Hoeveel huise kan Don met sy stel bou?</p>
<p>(A) 5 (B) 6 (C) 7 (D) 8 (E) 9</p>	<p>(A) 5 (B) 6 (C) 7 (D) 8 (E) 9</p>
<p>15. Ruan gets into an elevator (lift). He travels 5 floors down, 6 floors up and 7 floors down. He climbs out of the elevator on the 3rd floor. On which floor did he climb in?</p> <p>(A) 6th/6^{de} (B) 7th/7^{de} (C) 8th/8^{ste} (D) 9th/9^{de} (E) 3rd/3^{de}</p>	<p>15. Ruan klim in 'n hysbak in. Hy gaan 5 vloere af, 6 vloere op en 7 vloere af. Hy klim uit die hysbak op die 3de vloer. Op watter vloer het hy ingeklim?</p> <p>(A) 6th/6^{de} (B) 7th/7^{de} (C) 8th/8^{ste} (D) 9th/9^{de} (E) 3rd/3^{de}</p>

<p>16. How many books are on the shelf if the 14th book is the middle one ?</p> <p>(A) 29 (B) 28 (C) 27 (D) 14 (E) 7</p>	<p>16. Hoeveel boeke is daar op die rak as die 14de boek die middelste een is?</p> <p>(A) 29 (B) 28 (C) 27 (D) 14 (E) 7</p>
<p>17. A pen and a pencil cost R45 altogether. The pen costs twice as much as the pencil. How much does the pen cost?</p> <p>(A) R45 (B) R30 (C) R22,50 (D) R15 (E) R90</p>	<p>17. 'n Pen en 'n potlood kos altesaam R45. Die pen kos twee keer soveel as die potlood. Hoeveel kos die pen?</p> <p>(A) R45 (B) R30 (C) R22,50 (D) R15 (E) R90</p>
<p>18. If today is a Tuesday, what day of the week will it be 21 days from today?</p> <p>(A) Dinsdag (B) Woensdag (C) Donderdag (D) Vrydag (E) Saterdag</p>	<p>18. 10. As vandag Dinsdag is, watter dag sal dit oor 21 dae wees?</p> <p>(A) Dinsdag (B) Woensdag (C) Donderdag (D) Vrydag (E) Saterdag</p>
<p>19. How many squares are there in the picture below?</p> <div style="text-align: center;">  </div> <p>(A) 9 (B) 4 (C) 8 (D) 6 (E) 7</p>	
<p>20. Which of the following numbers is the smallest?</p> <p>(A) $\frac{1}{10}$ (B) $\frac{1}{100}$ (C) 0 (D) $\frac{9}{9}$ (E) $\frac{1}{2}$</p>	<p>20. Watter van die volgende getalle is die kleinste?</p> <p>(A) $\frac{1}{10}$ (B) $\frac{1}{100}$ (C) 0 (D) $\frac{9}{9}$ (E) $\frac{1}{2}$</p>
<p>21. Which number is halfway between 17 and 41?</p> <p>(A) 25 (B) 29 (C) 32 (D) 35 (E) 39</p>	<p>21. Watter getal is halfpad tussen 17 and 42?</p> <p>(A) 25 (B) 29 (C) 32 (D) 35 (E) 39</p>
<p>22. If # is an odd number, which odd number comes next?</p> <p>(A) # + 1 (B) # - 1 (C) # + 2 (D) # - 2 (E) #</p>	<p>22. As # 'n onewe getal is, wat is die volgende onewe getal?</p> <p>(A) # + 1 (B) # - 1 (C) # + 2 (D) # - 2 (E) #</p>

23. Bennie painted the following word on his shop window. If you look at the window from the other side, how would it look?

23. Bennie het die woord hieronder op sy winkel venster geverf. As jy van die ander kant af na die venster kyk, hoe sal dit lyk?

Shop

- (A) SohP (B) ɹu0b (C) Shop (D) Pohs (E) qonɹ

24. Instead of dividing a number by 6, Siphon added 6 to the number. His answer was 30. What should the correct answer be?

24. In plaas daarvan om 'n getal deur 6 te deel, het Siphon 6 by die getal getel. Sy antwoord was 30. Wat moes die korrekte antwoord wees?

- (A) 36 (B) 4 (C) 42 (D) 9 (E) 24

25. A figure is turned around and shown in different positions but not flipped over. Which figure cannot be obtained?

25. 'n Figuur word gedraai en in verskillende posisies vertoon, maar dit word nie omgekeel nie. Watter figuur kan nie verkry word nie?



Papers set by Steve Sherman and translated by Wilhelm Jonker