SOUTHERN AFRICAN PRIMARY MATHEMATICS OLYMPIAD FEMSSISA

GRADE 4

E-mail : Info@saolympiads .co.za website: www.saolympiads.co.za

DATE: 28 AUGUST 2023 – 1 SEPTEMBER 2023

TIME: 90 MINUTES

INSTRUCTIONS:

1. This booklet has 15 multiple choice and 5 open ended questions.
2. Use the answer sheet provided.

   Circle the letter corresponding to your answer.
3. All working details must be done in the space provided.
4. Calculators are not permitted.
5. Diagrams are not necessarily drawn to scale.
6. The first 15 problems carry 1 mark each and the next 5 carry 2 marks each.
7. You have 90 minutes for the paper which works out to an average of 4.5 minutes per question.
8. Read the questions carefully before answering.
9. Visit the website: www.saolympiads.co.za.

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GRADE FOUR

1. Find ☐ : ☐ - 38 = 46

   (A) 88 (B) 84 (C) 80 (D) 76

2. How many days are there from 15 May 2023 (Not included) to 2 September 2023?

   (A) 112 (B) 111 (C) 110 (D) 109

3. Consider the following pattern:

   2 + 4 = 6 = 2 x 3
   2 + 4 + 6 = 12 = 3 x 4
   2 + 4 + 6 + 8 = 20 = 4 x 5

   What is the sum of the first 20 even numbers?

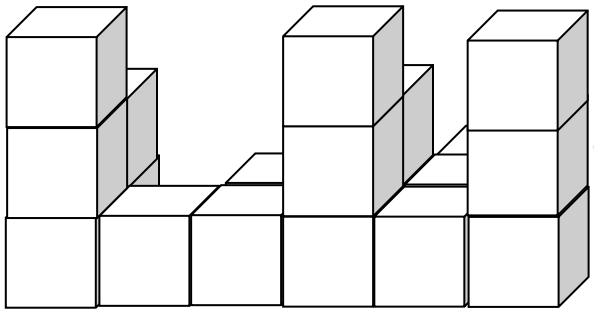
   (A) 320 (B) 360 (C) 400 (D) 420

4. What is the 15^{th} number of this addition sequence?

   8; 13; 18; 23; …

   (A) 63 (B) 68 (C) 73 (D) 78

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



   (A) 19 (B) 18 (C) 17 (D) 16

6. Romy placed biscuits in the oven at a certain time. It took 1 hour 25 minutes to bake. If the biscuits were ready at 10:10 then at what time was it placed in the oven?

   (A) 10:15 (B) 09:25 (C) 08:45 (D) 08:15

7. After removing $\frac{3}{4}$ of the water from a tank there was still 125 litres of water in the tank. What is the capacity of the tank in litres when full?

   (A) 450 (B) 500 (C) 550 (D) 600

8. Determine the 3 digit number if: -
   - The ten's digit is 1 more than twice the hundred's digit.
   - The number is divisible by 3.
   - The sum of the digits is 21.

   (A) 498 (B) 597 (C) 894 (D) 777

9. Amy collected 20 less coins than twice the number of coins that Temba collected. If both collected 400 coins, then how many coins did Amy collect?

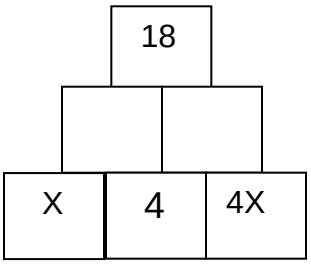
   (A) 260 (B) 280 (C) 300 (D) 320

10. In this subtraction problem, certain digits have been replaced by letters.
    What is the value of A x B?

$$\begin{array}{r} A\ B\ A \\ -\ B\ 5\ 8 \\ \hline 1\ 6\ 6 \end{array}$$

    (A) 14 (B) 12 (C) 10 (D) 8

11. In the game below called “PYRAMATHS”, the number on the right is halved and added to the number on the left to give the number in the box above. Find the number that should replace **X**.



(A) 6 (B) 7 (C) 8 (D) 9

12. An equal number of R2 and R5 coins were in the container. When added together, the total amount was R350. How many R5 coins were there?

(A) 50 (B) 60 (C) 70 (D) 40

13. Bunny was in the 43rd position of the queue. When the queue turned around she was in 31st in the queue. (Note: The person in the front of the queue (position 1) now is in the back of the queue (last))
How many people were in the queue?

(A) 71 (B) 72 (C) 73 (D) 74

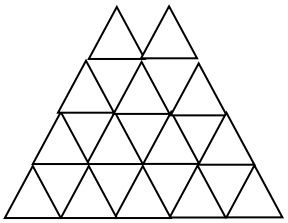
14. At a birthday party each child took a gift for each of their friends. There were 90 gifts altogether. How many children were at the party?

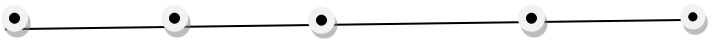
(A) 13 (B) 12 (C) 11 (D) 10

15. If the sum of the dates of the 5 Wednesdays in a month is 85 then what is the date of the 2nd Thursday of the month?

(A) 14th (B) 13th (C) 12th (D) 11th

16. How many triangles of all sizes are there in this figure?



17. 

Five houses A; B; C ;D and E are on a straight road. C is 300m to the left of D. E is 250m to the right of B. B is 300m to the left of A. A is 150 m to the right of C. What is the distance in metres (m) from B to D?

18. Study the following problem. Do you know what © is doing to the 2 numbers?

7 © 3 = 1; 11 © 4 = 3; 10 © 2 = 6

After you have discovered what © does, then find the answer to: 18 © 5

19. A company made rectangular tables with 4 legs and hexagonal tables with 6 legs. There were 240 legs and 50 tables. How many hexagonal tables were made?

20. Nosipho made 3 digit numbers from 4 plastic digits. These digits are: 4; 3; 5 and 2.
How many 3 digit numbers are odd?

MARKS: 1-15: 15 X 1 = 15
16-20: 5 X 2 = 10

TOTAL: 25