SOUTHERN AFRICAN FOUNDATION PHASE MATHEMATICS OLYMPIAD FEMSSISA

GRADE 3

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

DATE: 28 AUGUST 2023 – 1 SEPTEMBER 2023

TIME: 75 MINUTES

INSTRUCTIONS:

1. This booklet has 15 multiple choice 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 10 problems carry 1 mark each and the next 5 carry 2 marks each.
7. You have 75 minutes for the paper which works out to an average of 5 minutes per question.
8. Read the questions carefully before answering.
9. The teacher will read the question to you.
10. Visit the website: www.saolympiads.co.za.

ENJOY THE OLYMPIAD!

GRADE THREE

1. Find the value of ☐ which will make this sentence true.

45 + ☐ + ☐ + ☐ = 105

(A) 18 (B) 20 (C) 22

2. Each letter in the following addition problem represents a digit.

$$\begin{array}{r} A\ B \\ A\ B \\ +\ A\ B \\ \hline 1\ 3\ 5 \end{array}$$

What is the value of A x B?

(A) 30 (B) 25 (C) 20

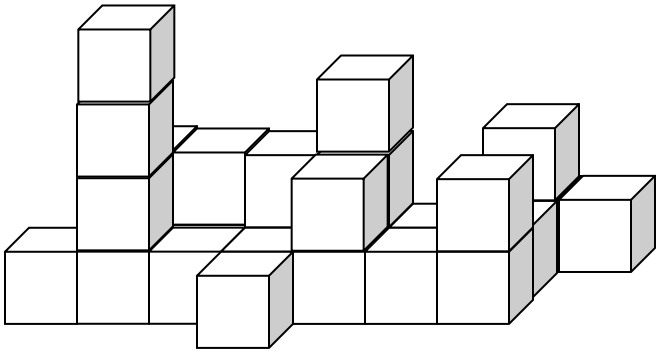
3. Write down the 12th number of this addition pattern:
7; 12; 17; 22; 27;…

(A) 52 (B) 62 (C) 67

4. Aryn counted in 6's as follows from 18:
18; 24; 30; 36;….

Determine the 20th term.
(A) 132 (B) 136 (C) 142

5. The total number of <u>cubes</u> in this arrangement is…



(A) 31 (B) 29 (C) 27

6. Denny bought an item for R15. He sold it for R35. He bought it back for R45. He finally sold it for R60. How much did he make altogether?

(A) R40 (B) R35 (C) R25

7. Jade gave out $\frac{1}{4}$ of the health cakes which was the same as 12.
What is $\frac{2}{3}$ of the number of cakes?

(A) 34 (B) 33 (C) 32

8. Guess the number I stand for:

- **I am a 3 digit number.**
- **My hundred's digit is 3 less than my unit's digit.**
- **The sum of my digits is 14.**
- **My units's digit is 1 more than twice my ten's digit.**

(A) 437 (B) 725 (C) 149

9. If 110 x ☐ = 230, then what is 220 x ☐ = …..

(A) 500 (B) 480 (C) 460

10. Each letter in the following subtraction problem represents a digit.

What is the value of A + B?

$$\begin{array}{r} A\ 3\ A \\ -\ \ B\ 8 \\ \hline B\ 7\ 8 \end{array}$$

(A) 9 (B) 11 (C) 13

11. Randy counted in 3's from 6 to 60.
Jones counted in 5's from 5 to 60.
How many numbers were not counted from 5 to 60?

(A) 27 (B) 28 (C) 29

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12. Who collected the highest amount for charity?

- **Des collected R300 more than Virginia.**
- **Trudy collected R400 less than Pansy**
- **Trudy collected R500 more than Des.**

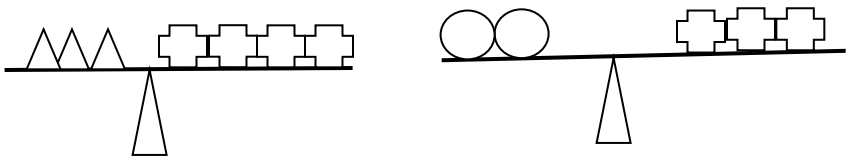
(A) Des (B) Pansy (C) Trudy

13. In the game below no letter must appear more than once in a row, column or in a 2 by 2 block (shaded).
Use only N; E; S and T.
What letter would be at 1?

	N		
			S
E			
	1		T

(A) S (B) E (C) N

14. The following is in balance.



How many circles can be balanced by 9 △'s?

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

15. The following exchanges were allowed:

- **3 blue stones for 5 orange stones.**
- **2 orange stones for 3 white stones.**
- **5 white stones for 4 green stones.**

How many green stones can one get for 1 blue stone?

(A) 2 (B) 4 (C) 6

END