



NATIONAL FOUNDATION PHASE MATHEMATICS OLYMPIAD GRADE ONE ENGLISH

2019

ROUND ONE QUESTION BOOKLET

DURATION: 1 HOUR 15 MINUTES TIME: 08:30 -09:45 MARKS: 20 DATES: 29 JULY-2 AUGUST 2019

NAME OF LEARNER:

NIA NATE O			
NAMEO	OF SCHOOL:		

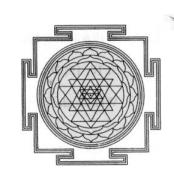
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- 3. Use blank pages for working. Circle the answer after you have done the working.
- 4. You are not allowed to use the calculator.
- 5. Read the question carefully before answering. Don't rush.
- 6. Your teacher will read the question to you.
- 7. First 10 questions 1 mark each.
- 8. Questions 11-15: 2 marks each.

ENJOY THE OLYMPIAD

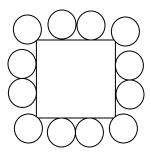


NON PROFIT COMPANY REGISTRATION NO: 2015/050119/08





1. Count the number of <u>circles</u> in this arrangement.



- (A) 10
- **(B)** 12
- (C) 14

2. Which number is 8 more than 15?

- 23; (A) 19
- 21; 19
 - **(B)** 21
- (C) 23

3. Which number is out of order?

7; 11; 9; 13

- (A) 11
- **(B)** 7
- (C) 13

4. Give the value of in this addition problem.

$$\begin{array}{c|c}
2 & 9 \\
+ & 5 & \hline
\\
\hline
8 & 3
\end{array}$$

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

5. Give the next number in this <u>pattern</u> (<u>adding</u> 6)

10;16; 22; 28; 34;.....

- (A) 40
- **(B)** 46
- (C) 52

6. Find the value of

$$27 + 3 + 8 = 31 + \square$$

- (A) 5
- **(B)** 6
- (C) 7

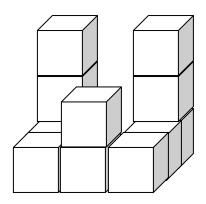
7. Look at this pretty square

5	7	9	11
19	17°	15	13
21	23	25	27
35	33	31	29

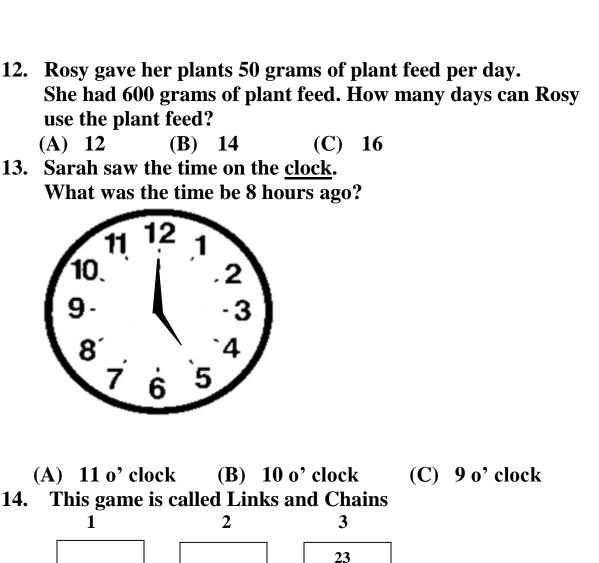
A coin was placed at 17.

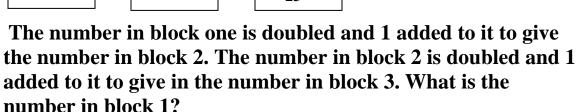
It was moved one(1) place to the right; two(2)places down; two(2) places to the left and 1 place up.
On which numbered square is the coin now on?

- (A) 21
- **(B)** 23
- (C) 25
- 8. How many blocks are there in this stack?



- (A) 16
- **(B)** 14
- (C) 12
- 9. <u>Halve</u> the number '18' and add '4' to the answer. What will the number now be?
 - (A) 11
- **(B)** 13
- (C) 15
- 10. You are given 4 plastic digits 6;3;2; 8
 What is the largest 3 digit number that can be made?
 - (A) 836
- **(B)** 863
- (C) 862
- 11. Petra gave 8 oranges to her friends. She then gave ½ of what was left to another group of friends. She still had 11 oranges left. How many oranges did Petra start off with?
 - (A) 28
- (B) 29
- (C) 30





- (A) 7
- **(B)** 5
- (C) 3

15.

A	В	C

A; B and C are envelopes which have secret numbers. The number in A is double the number in B. The number in C is 3 times the number in B. The sum of all 3 numbers is 48. What number is in envelope B?

- (A) 8
- **(B)** 12
- (C) 16

MARKS: 1-10: $10 \times 1 = 10$ 11-15: $5 \times 2 = 10$

TOTAL: 20





NATIONAL FOUNDATION PHASE MATHEMATICS OLYMPIAD GRADE TWO ENGLISH

2019

ROUND ONE QUESTION BOOKLET

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NIA NATE O			
NAMEO	OF SCHOOL:		

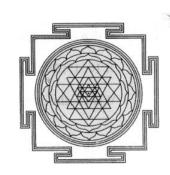
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ENJOY THE OLYMPIAD

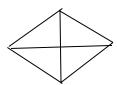


NON PROFIT COMPANY REGISTRATION NO: 2015/050119/08





1. Count the number of <u>triangles</u> in this arrangement:



(A) 8

- **(B)** 9
- (C) 10

2. Find the value of

- (A) 10
- **(B)** 15
- (C) 20

3. Find $\frac{1}{2}$ of $10 + \frac{1}{4}$ of 20

8

- (A) 5
- **(B)** 10
- (C) 15

4. Half of 18 equals:

- **(A)**
- **(B)** 9
- (C) 10

5. Write down the value of ____ in the following <u>addition</u> problem:-

$$\begin{array}{c|cccc} & & & \\ & + & 6 & 4 \\ \hline 1 & 5 & 2 \end{array}$$

(A) 8

- **(B)** 6
- (C) 4

6. After giving 45 health cakes to her friends in Grade 2F and 36 to her friends in Grade 2H she still had 15 left. How many did she start off with?

- (A) 96
- **(B)** 80
- (C) 64

7.

Write down the value of | in the subtraction problem:



(A) 6

- **(B)** 7
- (C) 8
- 8. There are 24 numbered blocks below:-

2	4	6	8	10	12
24	22	20	18	16	14
l					36
48	46	44	42	40 ^d	38

d is a disc at 40. It moves 2 blocks left, 3 blocks upwards;

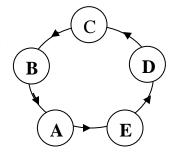
2 blocks left and 2 blocks to the down.

On which block is d now on ?

- (A) 26
- **(B)** 48
- (C) 28

9.

Ms rabbit moves from one lettered hutch to another starting at A; to E to D and so on in an anticlockwise direction.

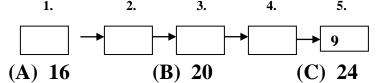


Ms Rabbit visited 83 hutches. Count A as 1. On which lettered hutch did Ms Rabbit end up in?

- (A) **E**
- **(B) D**
- (C) C

10. **Links and Chains**

Halve the number and add 4 each time to move from one block to the other. Which number is in block 1?:-



11. Find the mystery number.

X	Y
---	---

*I am a 2 digit number.

$$*X + Y + \overline{Y} = 19$$

$$*X - Y = 1$$

- (A) 67
- (B) 76 (C) 87
- 12. After giving 12 of her discs to Pansy and Sipho, Tembi still had 3/4 of her discs.

How many did Tembi start off with?

- (A) 36
- **(B)** 48
- (C) 60

13. Who is the tallest?

Apex is taller than Carey.

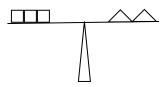
Apex is shorter than Dainty.

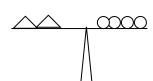
- (A) Apex
- (B) Dainty (C) Carey
- Sandy has R25 less than Randy. 14.

Randy has R35 more than Kandy.

How much does Kandy have if Sandy and Randy have R175?

- (A) R75
- **(B) R40**
- (C) R25
- The following is in balance. **15.**





How many circles are balanced by 6 squares?

(A)

- **(B) 6**
- (C) 8

MARKS: $1-10: 10 \times 1 = 10$

11-15: $5 \times 2 = 10$

TOTAL:20





NATIONAL FOUNDATION PHASE MATHEMATICS OLYMPIAD GRADE THREE ENGLISH

2019

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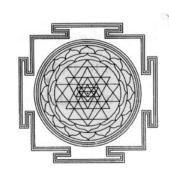
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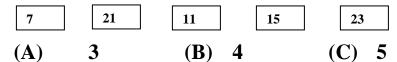




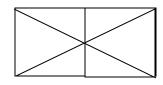
1.	Find the value of to make this <u>sentence</u> <u>true</u> .
	$60 + \square = 24 + \square + \square + \square$
	(A) 14 (B) 16 (C) 18
2.	My cellphone number is 0829444205
	The sum of the digits of my cellphone number is
	(A) 38 (B) 39 (C) 40
3.	Write down the 9 th number of this addition <u>pattern</u> :-
	5; 12; 19; 26;
	(A) 47 (B) 54 (C) 61
4.	
	12; 18; 24; 30;
	She stopped at the 20 th number.
	What number did she count last?
_	(A) 126 (B) 132 (C) 138
5.	•
	4; 4; 8; 12; 20; 32; (A) 130 (P) 136 (C) 142
6.	(A) 130 (B) 136 (C) 142 Ronald needs R280 to buy the football. He had
U.	•
	and Rilli nate and two Rall nates and tive Ra cains
	one R100 note and two R50 notes and five R5 coins. How much more does be need to buy this football?
	How much more does he need to buy this football?
7.	How much more does he need to buy this football? (A) R45 (B) R50 (C) R55
7.	How much more does he need to buy this football? (A) R45 (B) R50 (C) R55 Cher has R400. She needs R800. Each day she receives R24.
7.	How much more does he need to buy this football? (A) R45 (B) R50 (C) R55
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9.	If 88 x	= 600 then	what is
	22 x		
	(A) 210 <u> </u>	(R) 190	(C) 150

10. Enver added three card numbers at a time. How many answers were more than 45?



11. How many <u>triangles</u> of all sizes are there in this <u>figure</u>?



- (A) 8 (B) 10 (C) 12
- 12. Barnie collected R40 less than Amos.
 Corrie collected R20 more than Daisy.
 Barnie collected R60 more than Corrie.
 Who collected the least amount?
 - (A) Barnie (B) Corrie (C) Daisy

13. In the game below no letter must appear more than once in a <u>row</u>, <u>column</u> or 2 by 2 <u>block(shaded)</u>.

Use only R; E; A and D.

What letter would be at 2?

			A	
		2		
	E			D
		R	E	
(A)	\mathbf{A}		(B)) E

(C) **D**

14. Guess the number I stand for:-

- * I am a 3 digit number.
- * My ten's digit is 1 more than twice my hundred's digit.
- * The <u>sum</u> of my <u>digits</u> is 12.
- * My unit's digit is 1 less than 3 times my ten's digit.
- (A) 372
- **(B)** 327
- (C) 732

15. B collected ½ the money that A collected. B and C collected R225.

collected.

Together A;B and C R525.

How much money did B collect?

- (A) **R250**
- **(B) R200**
- (C) R150

MARKS: $1-10: 10 \times 1 = 10$

11-15: $5 \times 2 = 10$

TOTAL: 20