# National Foundation Phase Maths Olympiad - Grade2

**Collection Editor:**

The Association for Mathematics Education of South Africa - Kwa-Zulu Natal

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**Authors:**
The Association for Mathematics Education of South Africa - Kwa-Zulu Natal
Neels van der Westhuizen

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**C O N N E X I O N S**

**Rice University, Houston, Texas**

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# Chapter 1

# National Foundation Phase Maths Olympiad - Answer sheet template[1]

## 1.1 INSTITUTE FOR ADVANCEMENT OF MATHEMATICS AND SCIENCE (IAMS) NATIONAL FOUNDATION PHASE MATHEMATICS OLYMPIAD

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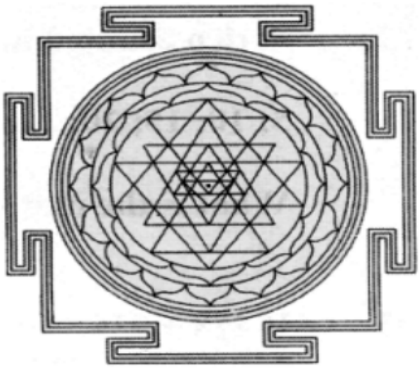

**Figure 1.1**

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ANSWER SHEET
NAME OF LEARNER:_____
GRADE:_____
Circle the correct answer after doing your working.

[1] This content is available online at <http://cnx.org/content/m35678/1.1/>.

| | | | | |
|---|---|---|---|---|
| 1 | | A | B | C |
| 2 | | A | B | C |
| 3 | | A | B | C |
| 4 | | A | B | C |
| 5 | | A | B | C |
| 6 | | A | B | C |
| 7 | | A | B | C |
| 8 | | A | B | C |
| 9 | | A | B | C |
| 10 | | A | B | C |
| 11 | | A | B | C |
| 12 | | A | B | C |
| 13 | | A | B | C |
| 14 | | A | B | C |
| 15 | | A | B | C |

**Table 1.1**

MARKS: Numbers 1-10: 10 x 1 = 10
Numbers 11-15 : 5 x 2 = 10 (TOTAL: 20)

# Chapter 2

# National Foundation Phase Maths Olympiad - Grade two - final round - 2006[1]

## 2.1 INSTITUTE FOR ADVANCEMENT OF MATHEMATICS AND SCIENCE (IAMS) NATIONAL FOUNDATION PHASE MATHEMATICS OLYMPIAD

**Figure 2.1**

[1] This content is available online at <http://cnx.org/content/m35670/1.1/>.

## 2.2 GRADE TWO – FINAL ROUND PAPER: 2006 QUESTION BOOKLET

DURATION: 1 HOUR 15 MINUTES
MARKS: 20
NAME OF LEARNER:_____
NAME OF SCHOOL:_____

## 2.3 INSTRUCTIONS TO LEARNERS:

1. You are expected to answer 15 questions.
2. These are multiple choice questions. Circle the correct answer.
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 11-20: 2 marks each.

ENJOY THE OLYMPIAD

## 2.4 Test Questions:

### 2.4.1 Exercise 1

Write down the $7^{th}$ term of the sequence:
7; 10; 13; 16; . . .

### 2.4.2 Exercise 2

Write down the unit's digit of the $45^{th}$ number.
5; 10; 15; 20; . . .

### 2.4.3 Exercise 3

Terry counted in 2's as follows:
2; 4; 6; 8; 10; . . .
What position does the number 130 occupy?

### 2.4.4 Exercise 4

Each letter in the following addition problem represents a digit. Find the digit B.

$$\begin{array}{r} \mathbf{A\ A} \\ +\mathbf{B\ A} \\ \hline \mathbf{1\ 1\ 2} \end{array}$$

**Figure 2.2**

### 2.4.5 Exercise 5

Find the value of $\Delta$:

$$45 - \Delta = \Delta + \Delta + \Delta + \Delta + \Delta - \Delta \tag{2.1}$$

### 2.4.6 Exercise 6

To move from one block to the next the rule is double the number and subtract one.

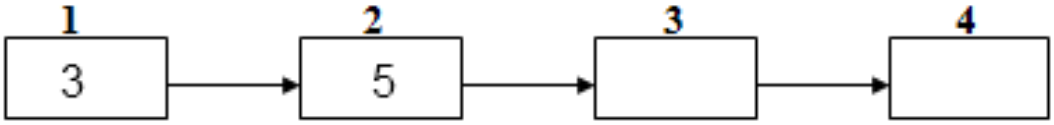


**Figure 2.3**

What number is in block 4?

### 2.4.7 Exercise 7

Give the largest two digit even number such that the sum of the digits is 9 .

### 2.4.8 Exercise 8

How many blocks are there in this stack?

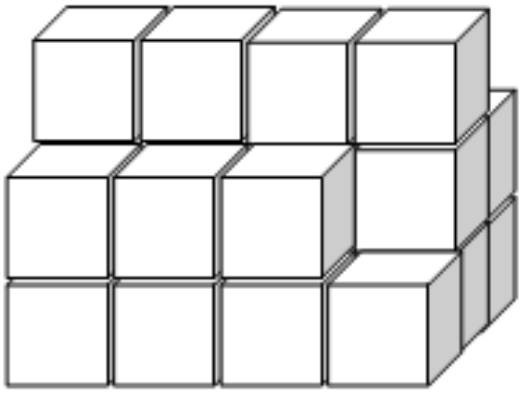

**Figure 2.4**

### 2.4.9 Exercise 9

2 more than $\frac{1}{4}$ of the cakes is 6. How many cakes are there?

### 2.4.10 Exercise 10

Guess the number I stand for.
* I am a 3 digit number.
* My hundred's digit is 1 more than my unit's digit.
* My ten's digit can be counted in 3's.
* The sum of my digits is 16.

### 2.4.11 Exercise 11

Try to find out what * is doing to the 2 numbers.
3 * 4 = 5
7 * 3 = 8
1 * 1 = 0
4 * 4 = 6
Now determine the answer to :
8 * 5

### 2.4.12 Exercise 12

In a 50 metre race Jen beat Tara by 4 metres. Tara beat Cindy by 3 metres. If all three walk at the same pace then how far will Cindy be behind Jen in a 100 metre race ?

### 2.4.13 Exercise 13

White and green beads are arranged as in the following diagram.
W W G G G W W G G G W W ....
If this arrangement has 102 beads then work out the number of green beads .

### 2.4.14 Exercise 14

Five friends live on the same straight road. Ren lives to the right of Lindy. Pat lives to the right of Lindy but to the left of Jessy. Al lives to the left of Lindy. Pat lives between Al and Ren. Who lives between Pat and Jessy ?

### 2.4.15 Exercise 15

Stan collected R10 more for charity than Liz. Liz collected R20 less for charity than Connie. A total of R270 was collected for charity.What amount was collected by Liz ?

# Chapter 3

# National Foundation Phase Maths Olympiad - Grade two - round 1 - 2007[1]

## 3.1 INSTITUTE FOR ADVANCEMENT OF MATHEMATICS AND SCIENCE (IAMS) NATIONAL FOUNDATION PHASE MATHEMATICS OLYMPIAD

**Figure 3.1**

## 3.2 GRADE TWO – ROUND ONE PAPER: 2007 QUESTION BOOKLET

DURATION: 1 HOUR 15 MINUTES
MARKS: 20
NAME OF LEARNER:_____
NAME OF SCHOOL:_____

[1]This content is available online at <http://cnx.org/content/m35673/1.1/>.

## 3.3 INSTRUCTIONS TO LEARNERS:

1. You are expected to answer 15 questions.
2. These are multiple choice questions. Circle the correct answer.
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 11-20: 2 marks each.

ENJOY THE OLYMPIAD

## 3.4 Test Questions:

### 3.4.1 Exercise 1

Count the number of rectangles in this arrangement:

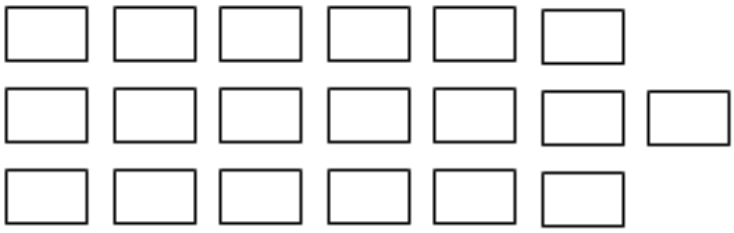

**Figure 3.2**

(A) 17 (B) 19 (C) 21

### 3.4.2 Exercise 2

Find the value of $\Delta$:

$$56 + 34 = 50 + \Delta \tag{3.1}$$

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

### 3.4.3 Exercise 3

Find $\frac{1}{2}$ of 36.

(A) 16 (B) 18 (C) 20

### 3.4.4 Exercise 4

Double 39 equals?

(A) 74 (B) 76 (C) 78

### 3.4.5 Exercise 5

Write down the value of $\Delta$ in the following addition problem:

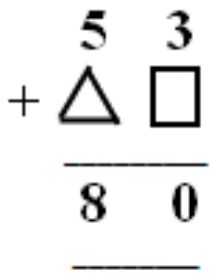


**Figure 3.3**

(A) 3 (B) 2 (C) 1

### 3.4.6 Exercise 6

After receiving 18 beads from Precious, Denny had 60 beads. How many beads did she start off with?
(A) 32 (B) 36 (C) 42

### 3.4.7 Exercise 7

Write down the value of $\Delta$ in this subtraction problem:

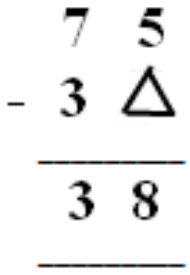


**Figure 3.4**

(A) 5 (B) 7 (C) 9

### 3.4.8 Exercise 8

There are 24 numbered blocks below: