

PAPER K



SEAMO

Southeast Asian
Mathematical
Olympiad

DO NOT OPEN THIS BOOKLET UNTIL INSTRUCTED.

STUDENT'S NAME:

Read the instructions on the **ANSWER SHEET** and fill in your **NAME, SCHOOL** and **OTHER INFORMATION**.

Use a 2B or B pencil.

Do **NOT** use a pen

Rub out any mistakes completely.

You **MUST** record your answers on the **ANSWER SHEET**.

SENIOR

Mark only **ONE** answer for each question.

Marks are **NOT** deducted for incorrect answers.

QUESTIONS 1 TO 20

Use the information provided to choose the **BEST** answer from the five possible options.

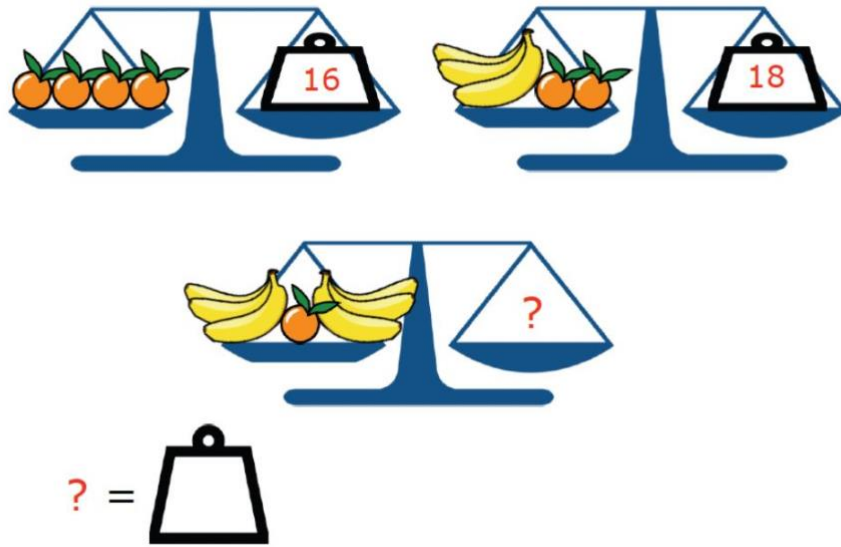
On your **ANSWER SHEET** shade the option that matches your answer.

QUESTIONS 21 TO 25

On your **ANSWER SHEET** write your answer within the box provided. Units are not required.

You are **NOT** allowed to use a calculator.

1. Find the missing number.

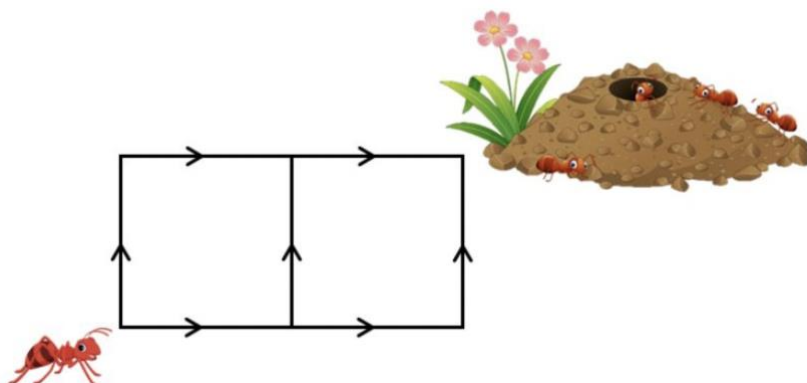


(A) 14

(B) 18

(C) 24

2. How many ways are there for the ant to return to its nest?

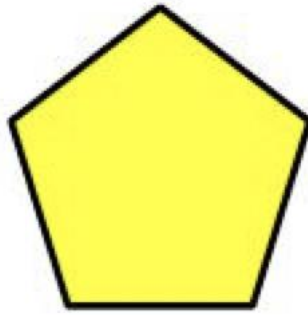


(A) 3

(B) 2

(C) 1

3. How many corners does this shape have?

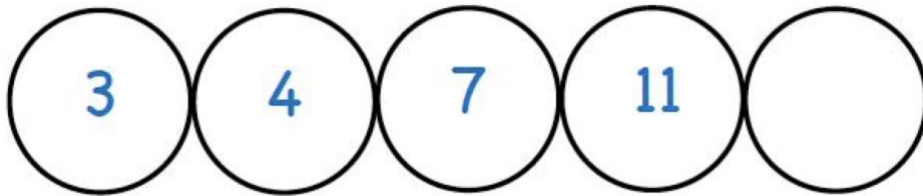


(A) 3

(B) 4

(C) 5

4. Find the missing number.

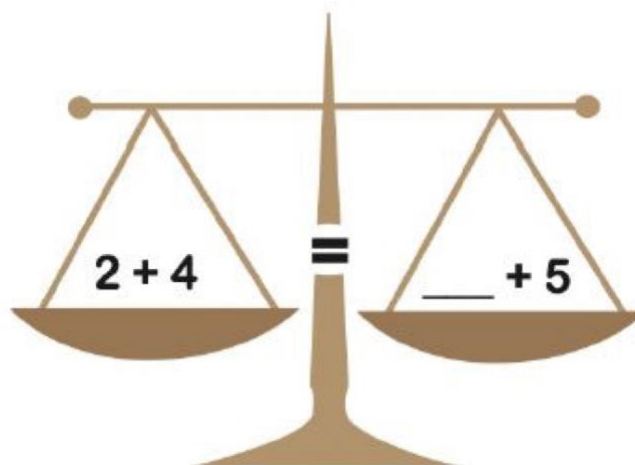


(A) 16

(B) 17

(C) 18

5. Find the missing number.



QUESTION	ANSWER	SOLUTION	TOPIC	LEVEL
1	C	$4 \text{ oranges} = 16$ $1 \text{ orange} = 16 \div 4 = 4$ $2 \text{ oranges} + 1 \text{ banana} = 18$ $1 \text{ banana} = 18 - 4 - 4 = 10$ $2 \text{ bananas} + 1 \text{ orange} = 10 + 10 + 4 = 24$	Algebra	Hard
2	A	Follow the arrows and count the paths.	Shortest Path	Easy
3	C	Count the corners in the shape.	Geometry	Easy
4	C	<p>The next term is the sum of the two previous terms (Fibonacci Series).</p> $3 + 4 = 7$ $4 + 7 = 11$ $7 + 11 = 18$	Patterns	Medium
5	1	<p>Left hand side: $2 + 4 = 6$</p> <p>Right hand side: $1 + 5 = 6$</p>	Algebra	Easy

Level of difficulty refers to the expected level of difficulty for the question.

Easy	more than 70% of candidates will choose the correct option
Medium	about 50–70% of candidates will choose the correct option
Medium/Hard	about 30–50% of candidates will choose the correct option
Hard	less than 30% of candidates will choose the correct option