ICAS

SAMPLE

PAPER A

MATHEMATICS

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 pencil. Do **NOT** use a coloured pencil or a pen.

Rub out any mistakes completely.

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

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

Your score will be the number of correct answers.

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

There are **5 MULTIPLE-CHOICE QUESTIONS** (1–5).

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

On your **ANSWER SHEET** fill in the oval that matches your answer.

You may use a ruler and spare paper.

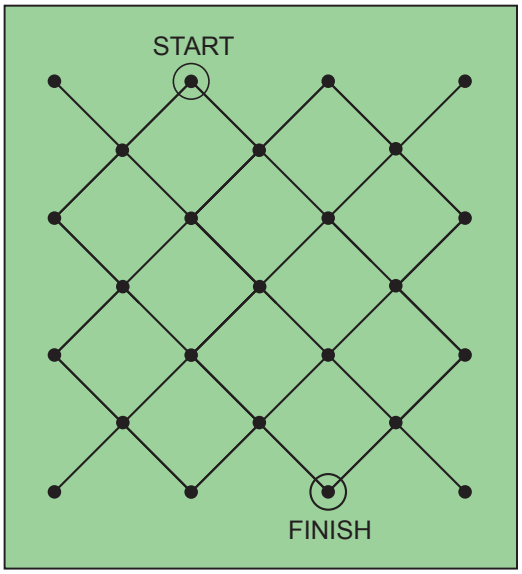
You are **NOT** allowed to use a calculator.

1. This is John's birthday cake.

How many candles are on his cake?

(A) 5
(B) 6
(C) 7
(D) 8

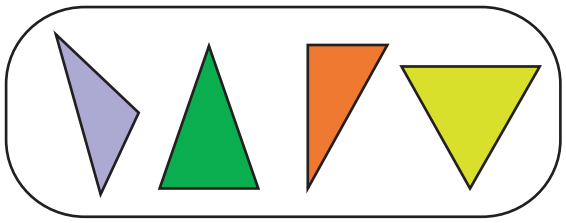
2. In the game below, Rita can only move along the lines, one dot at a time.



What is the **least** number of moves Rita can make to get from START to FINISH?

(A) 2
(B) 4
(C) 5
(D) 6

3. Here is a group of shapes.



Which other shape could belong to this group?

(A)

(B)

(C)

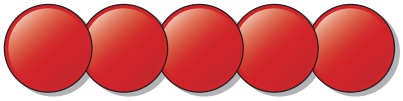
(D)

4. Lim makes toy cars.
Each car has 4 wheels.

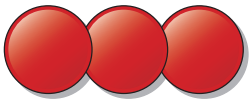
How many cars can he make using these wheels?

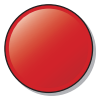
(A) 6
(B) 8
(C) 12
(D) 24

5. These five counters are overlapped and arranged into a row. The area covered by the five counters is 31 square units.



Two counters are taken away. The area covered by the remaining three counters is 19 square units.



What is the area of one counter  ?

(A) 4 square units
(B) 5 square units
(C) 6 square units
(D) 7 square units

END OF PAPER

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THE FOLLOWING YEAR LEVELS SHOULD SIT THIS PAPER:

Australia	Year 3
Brunei	Primary 3
Hong Kong	Primary 3
Indian Subcontinent[1]	Class 3
Indonesia	Year 4
Malaysia	Standard 3
Middle East[2]	Class 3
New Zealand/Pacific[3]	Year 4
Singapore	Primary 2
Southern Africa[4]	Grade 3

1 Indian Subcontinent Region: India, Sri Lanka, Nepal, Bhutan and Bangladesh.
2 Middle East Region: United Arab Emirates, Qatar, Kuwait, Saudi Arabia, Egypt, Bahrain, Oman, Turkey, Lebanon, Tunisia, Morocco, Libya, Algeria and Jordan.
3 Pacific Region: Vanuatu, Papua New Guinea and Fiji.
4 Southern Africa Region: South Africa, Botswana, Lesotho, Swaziland, Zimbabwe and Namibia.

PAPER A

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ICAS

PAPER A

M

HOW TO FILL OUT THIS SHEET:

USE A PENCIL

- Print your details clearly in the boxes provided.
- Make sure you fill in only one oval in each column.
- Rub out all mistakes completely.
- Do not use a coloured pencil or pen.

EXAMPLE 1: Debbie Bach

FIRST NAME	LAST NAME
DEBBIE	BACH

EXAMPLE 2: Chan Ai Beng

FIRST NAME	LAST NAME
CHAN	AI BENG

EXAMPLE 3: Jamal bin Abas

FIRST NAME	LAST NAME
JAMAL BIN	ABAS

FIRST NAME to appear on certificate

LAST NAME to appear on certificate

SAMPLE

Are you male or female? ○ Male ○ Female

Does anyone in your home usually speak a language other than English? ○ Yes ○ No

School name: _____

_____

Town / suburb: _____

Today's date: ____ / ____ / ____ **Postcode:** _____

DATE OF BIRTH

Day Month Year

STUDENT ID (optional)

CLASS (optional)

TO ANSWER THE QUESTIONS

MULTIPLE CHOICE

Questions 1 to 5

Example: 4 + 6 =

(A) 2
(B) 9
(C) 10
(D) 24

The answer is 10, so fill in the oval Ⓒ, as shown.

Ⓐ Ⓑ ● Ⓓ

USE A PENCIL
DO NOT USE A COLOURED PENCIL OR PEN

START

1	Ⓐ	Ⓑ	Ⓒ	Ⓓ
2	Ⓐ	Ⓑ	Ⓒ	Ⓓ
3	Ⓐ	Ⓑ	Ⓒ	Ⓓ
4	Ⓐ	Ⓑ	Ⓒ	Ⓓ
5	Ⓐ	Ⓑ	Ⓒ	Ⓓ

SAMPLE

M PAPER A

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QUESTION	KEY	SOLUTION	STRAND	LEVEL OF DIFFICULTY
1	C	Correctly count the candles. There are 7 candles on the cake.	Number and Arithmetic	Easy
2	D	Moving from one dot to the next counts as one move. Two south-west and four south-east moves (or four south-east and two south-west) are the minimum required to get from 'START' to 'FINISH'.	Space and Geometry	Easy
3	B	The set consists of shapes that are triangles.	Space and Geometry	Easy
4	A	There are 24 wheels. Each car needs four wheels. Divide 24 by 4 to work out the number of cars Lim can make. 24 divided by 4 equals 6.	Number and Arithmetic	Easy
5	D	Area of five counters – Area of three counters = 31 − 19 =12 (Area of two counters) Area of three counters – Area of two counters = 19 − 12 = 7 (Area of one counter)	Measurement	Hard

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

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