

ICAS

PAPER

F

SAMPLE



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 **4 MULTIPLE-CHOICE QUESTIONS** (1–4).

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.

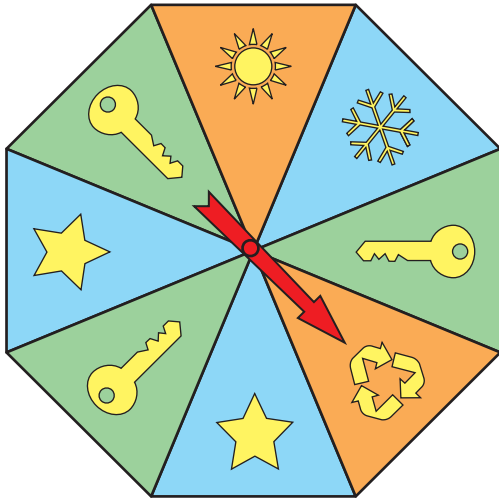
There is **1 FREE-RESPONSE QUESTION** (5).

Write your answer in the boxes provided on the **ANSWER SHEET** and fill in the ovals that match your answer.

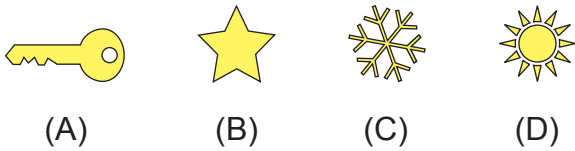
You may use a ruler and spare paper.

A **CALCULATOR** is required.

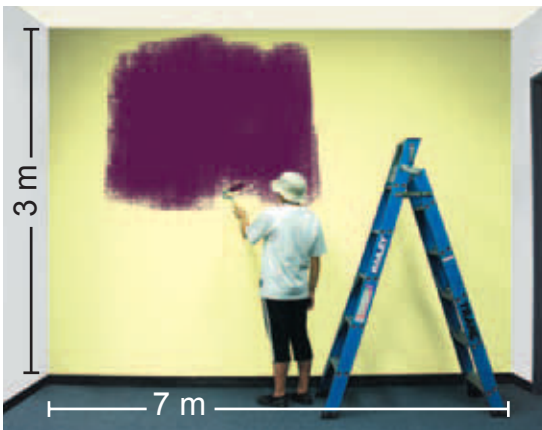
1. Alan uses this spinner in a game.



On which symbol is the arrow most likely to stop?



2. Fran's father has agreed to pay her \$1.50 per square metre for painting the wall shown.



How much will Fran be paid when she finishes painting the whole wall?

- (A) \$10.50
- (B) \$14.00
- (C) \$31.50
- (D) \$42.00

3. This picture shows an airport departure screen.

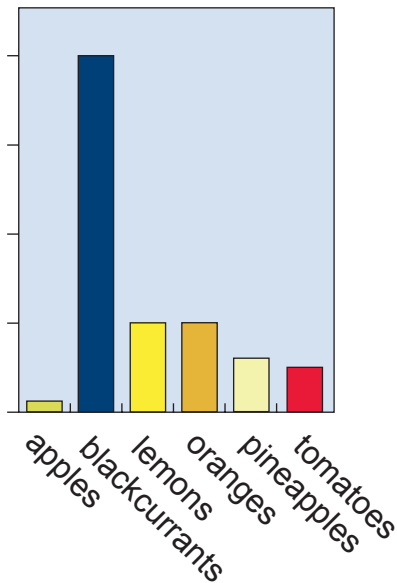
Time	Flight Number	Destination	Gate
13:00	F973	London	R
13:25	F613	Singapore	S
13:35	F023	Hong Kong	R
13:45	F255	New York	S
13:50	F340	Paris	R
13:50	F812	Auckland	S

Which flight leaves 15 minutes before the Paris flight?

- (A) F023
- (B) F812
- (C) F613
- (D) F973

4. Mary drew this graph to show the amount of Vitamin C in some different types of food. She did not complete the vertical scale.

Natural Sources of Vitamin C



Which of these tables could be correct for Mary's graph?

Food	Vitamin C
apples	6
blackcurrants	50
lemons	50
oranges	50
pineapples	30
tomatoes	25

(A)

Food	Vitamin C
apples	6
blackcurrants	100
lemons	50
oranges	50
pineapples	30
tomatoes	50

(B)

Food	Vitamin C
apples	6
blackcurrants	200
lemons	50
oranges	50
pineapples	30
tomatoes	50

(C)

Food	Vitamin C
apples	6
blackcurrants	200
lemons	50
oranges	50
pineapples	30
tomatoes	25

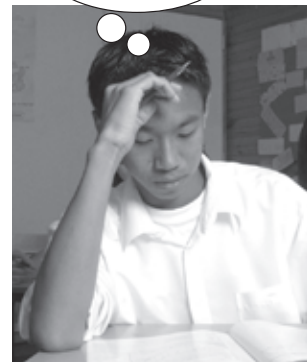
(D)

QUESTION 5 IS FREE RESPONSE.

Write your answer in the boxes provided on the ANSWER SHEET and fill in the ovals that match your answer.

5. Ricky is thinking of a positive 3-digit number.

'If I subtract 9 from the number, the result will be divisible by 9.
If I subtract 10 from the number, the result will be divisible by 10.
If I subtract 11 from the number, the result will be divisible by 11.'



What is the lowest possible number Ricky is thinking of?

END OF PAPER

ACKNOWLEDGMENT

Copyright in this booklet is owned by UNSW Global Pty Limited, unless otherwise indicated. Every effort has been made to trace and acknowledge copyright. UNSW Global Pty Limited apologises for any accidental infringement and welcomes information to redress the situation.

THE FOLLOWING YEAR LEVELS SHOULD SIT THIS PAPER:

Australia	Year 8
Brunei	Form 2 & 3
Hong Kong	Form 2
Indian Subcontinent¹	Class 8
Indonesia	Year 9
Malaysia	Form 2
Middle East²	Class 8
New Zealand/Pacific³	Year 9
Singapore	Secondary 1
Southern Africa⁴	Grade 8

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.



© 2017 UNSW Global Pty Limited. Copyright in this document is owned by UNSW Global Pty Limited.



UNSW Global
AUSTRALIA

TO ANSWER THE QUESTIONS

MULTIPLE CHOICE

Questions 1 to 4

Example: $4 + 6 =$

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

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

(A) (B) (C) (D)

START

- | | | | | |
|---|---------------------------|---------------------------|---------------------------|---------------------------|
| 1 | <input type="radio"/> (A) | <input type="radio"/> (B) | <input type="radio"/> (C) | <input type="radio"/> (D) |
| 2 | <input type="radio"/> (A) | <input type="radio"/> (B) | <input type="radio"/> (C) | <input type="radio"/> (D) |
| 3 | <input type="radio"/> (A) | <input type="radio"/> (B) | <input type="radio"/> (C) | <input type="radio"/> (D) |
| 4 | <input type="radio"/> (A) | <input type="radio"/> (B) | <input type="radio"/> (C) | <input type="radio"/> (D) |

FREE RESPONSE

Question 5

Example: $6 + 6 =$

- The answer is 12, so WRITE your answer in the boxes.
- Write only ONE digit in each box, as shown, and fill in the correct ovals, as shown.

	1	2
①	①	①
①	●	①
②	②	●
③	③	③
④	④	④
⑤	⑤	⑤
⑥	⑥	⑥
⑦	⑦	⑦
⑧	⑧	⑧
⑨	⑨	⑨



USE A PENCIL

DO NOT USE A COLOURED PENCIL OR PEN

SAMPLE

5			
①	①	①	①
②	②	②	②
③	③	③	③
④	④	④	④
⑤	⑤	⑤	⑤
⑥	⑥	⑥	⑥
⑦	⑦	⑦	⑦
⑧	⑧	⑧	⑧
⑨	⑨	⑨	⑨



Your privacy is assured as UNSW Global Pty Limited fully complies with appropriate Australian privacy legislation. Visit www.eaa.unsw.edu.au for more details.



QUESTION	KEY	SOLUTION	STRAND	LEVEL OF DIFFICULTY
1	A	The arrow will be most likely to stop on the symbol with the greatest frequency (3 out of 8)	Chance and Data	Easy
2	C	The area of the wall is $3 \times 7 = 21$ square metres. She will be paid $21 \times \$1.50 = \31.50 .	Measurement	Easy
3	A	From the table you can see that the Paris flight departs at 13:50. Fifteen minutes before that is 13:35 and that is the time when flight F023 departs.	Measurement	Easy
4	D	With a careful look at all options, the main difference is the ratio of tomatoes to blackcurrants. Using the given graph, the ratio of tomatoes to blackcurrants is 1:8. Only option D gives this ratio.	Chance and Data	Easy
5	990	990 is the lowest common multiple of 9, 10 and 11.	Number and Arithmetic	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

