



ISMC International Singapore
Maths Competition

INTERNATIONAL SINGAPORE MATHS COMPETITION (Primary 4)

60 minutes

Instructions to participants

1. Do not open the booklet until you are told to do so.
2. Attempt ALL 25 questions.
3. Write your answers neatly in the Answer Sheet provided.
4. Marks are awarded for correct answers only.
5. All figures are not drawn to scale.
6. Calculators may be used.

Questions in Section A carry 2 marks each, questions in Section B carry 4 marks each and questions in Section C carry between 6 to 10 marks each.

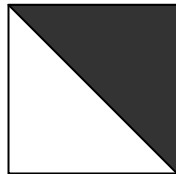
Jointly organised by



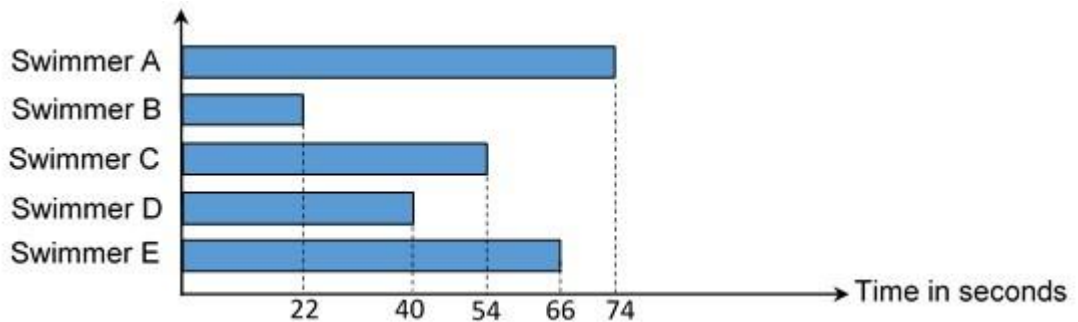
Section A

Each of the questions 1 to 10 carries 2 marks.

1. I am a 3-digit number. Among my factors are 5 and 8. My 3 digits add up to only 3. What number am I?
2. Gwen and Hannah have the same number of cookies. How many cookies should Gwen give to Hannah to have 8 cookies less than Hannah?
3. What is the length of the square if the area of the shaded part is 8 cm^2 ?

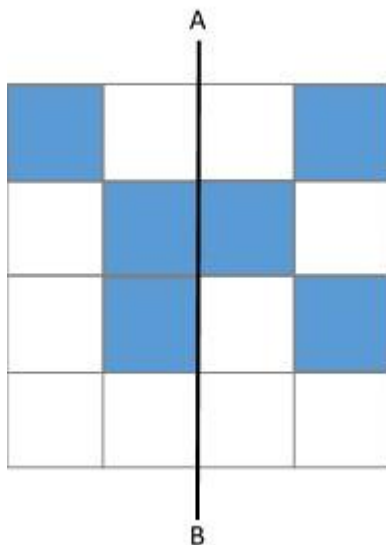


4. Which swimmer completed first in the race?

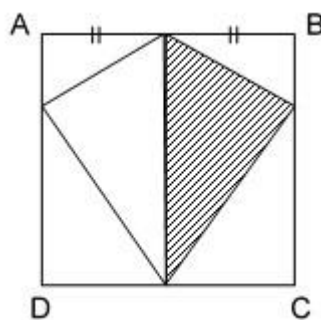


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5. The figure below is made up of squares. In your Answer Sheet, shade two squares to form a symmetrical figure with AB as the line of symmetry.

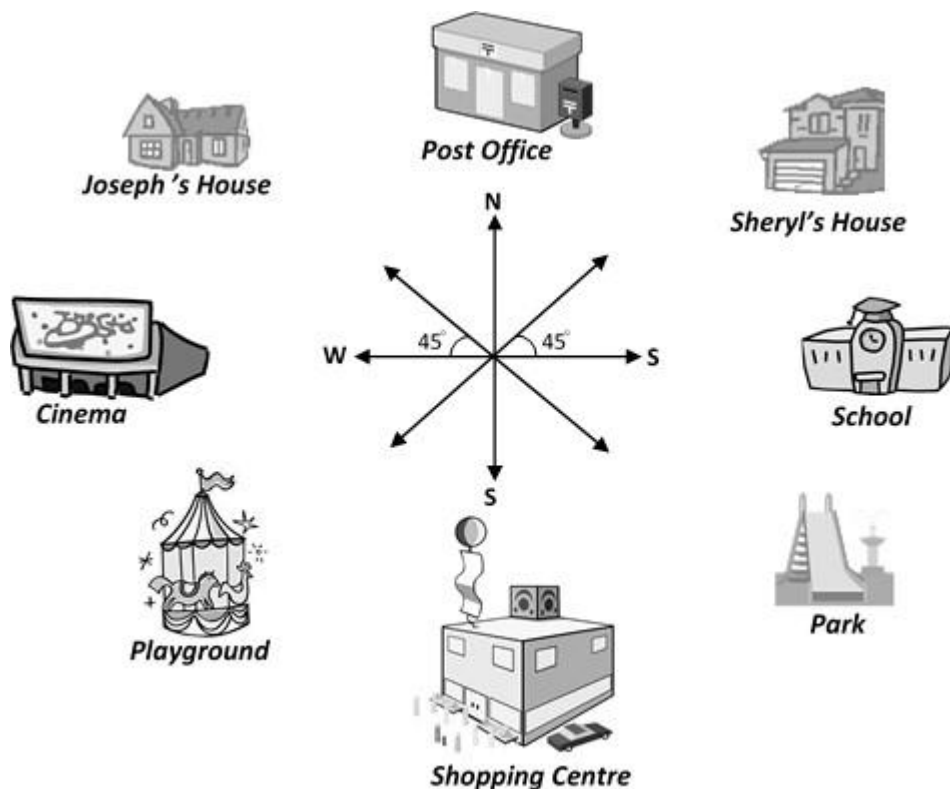


6. What fraction of Square ABCD is shaded?
(Give your answer in the simplest form.)



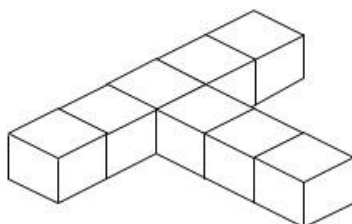
7. Amir, Bala, and Chandra each has a different favourite food which are satay, pizza, and nasi lemak. Amir does not like pizza or nasi lemak. Bala does not like pizza. Name the favourite food of each person.

8.



Kelly is facing West. She wants to turn clockwise to face the Park. How many degrees must she turn?

9. Eight 1-cm cubes are put together to form the T-figure shown. The complete outside of the T-figure is painted blue and then separated into 1-cm cubes. How many of the cubes have exactly four blue faces?



10. A rectangle is divided into 4 parts as shown in the diagram. What is the area of the shaded part?

28 cm ²	36 cm ²
21 cm ²	

Section B

Each of the questions 11 to 20 carries 4 marks.

11. There were seven friends. Each person shook hands with each of the other six friends. How many handshakes were there altogether?

12. Arrange the following fractions in ascending order.

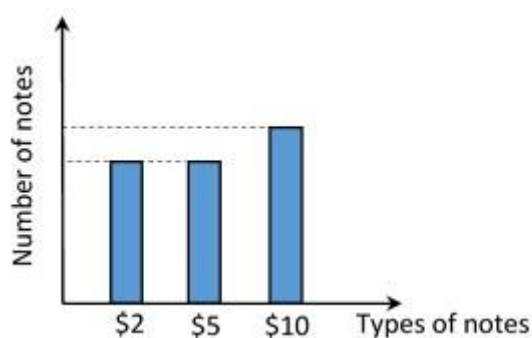
$$\frac{7}{10}, \frac{2}{5}, \frac{16}{19}, \frac{11}{14}, \frac{22}{25}, \frac{4}{7}$$

13. There are 42 pupils in a class. In a Mathematics test consisting of 4 questions, 29 pupils answer Question 1 correctly, 34 answer Question 2 correctly, 33 answer Question 3 correctly and 38 answer Question 4 correctly. At least how many pupils answer all 4 questions correctly?

14. A, B and C are different whole numbers. If $A \times A = B$ and $C \times C \times C = B$, and B is less than 100, then B must be _____.

15. Prince Charming was blindfolded and given a box containing 10 gold keys, 8 silver keys and 6 bronze keys. At least how many keys must he draw from the box to be certain that he has one of each kind of keys?

16. Natalie plotted a bar graph of the number of \$2, \$5 and \$10 notes she has in her bank. She has more than 1 of each type of notes and a total of \$227. How many \$10 notes does Natalie have?



17. Arrange the digits 1, 3, 9, 0 and 6 to form the biggest 5-digit number that can be divided exactly by 4.

18. $\frac{A}{13} = \frac{84}{273} = \frac{144}{B}$ What are the values of A and B?

19. The secret code to Mr Poh's safe is a 5-digit number. The digit in the Tens place is 1 less than the digit in the Ones place and 4 more than the digit in the Hundreds place. The sum of the digits in the Thousands and Ones places is equal to the digit in the Ten Thousands place. None of the digits is 0. If the digit in the Ones place is 8, can you decode Mr Poh's number for the safe?

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20. The total age of Lydia and Zoey is 58 years 9 months.
Zoey is 11 years 7 months older than Lydia.
How old is Zoey?

Section C

Questions 21, 22, 23, 24 and 25 carry 6, 7, 8, 9 and 10 marks respectively.

21. The table below shows the number of different colour beads that Mary has.

Colour	Number
Red	26
Yellow	12
Pink	18
Purple	?
Orange	?
Blue	25

The total number of orange and blue beads is $\frac{5}{7}$ of the total number of red, yellow and pink beads. The total number of purple and orange beads makes up $\frac{1}{4}$ of all the total beads that Mary has. How many purple beads does Mary have?

22. Mrs Wong has more than 50 but less than 60 pots of plants. She arranged the pots around her hexagonal garden such that there is a pot at each corner and an equal number of pots on each side. How many pots were there on each side?

23. There is a total of 560 swimmers and runners in the Olympics. $\frac{3}{5}$ of the number of swimmers is equal to $\frac{3}{11}$ of the number of runners. How many more runners than swimmers are there?

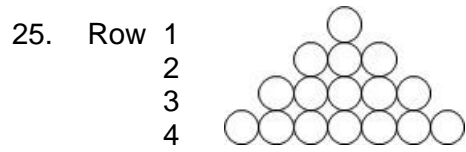
24. Three ladies Anne, Betty and Carol made the following statements:

Anne: I am 22 years old.
I am 2 years younger than Betty.
I am 1 year older than Carol.

Betty: I am not the youngest.
Carol and I are 3 years apart.
Carol is 25 years old.

Carol: I am younger than Anne.
Anne is 23 years old.
Betty is 3 years older than Anne.

If only two of the three statements made by each lady are true, find the age of Anne.



How many circles will there be in Row 2016?