

2018 MATHEMATICS HONG KONG

DO NOT OPEN THIS BOOKLET UNTIL INSTRUCTED.

40 QUESTIONS

TIME ALLOWED: 45 MINUTES

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 40 MULTIPLE-CHOICE QUESTIONS (1-40).

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

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

You may use a ruler and spare paper.

You are NOT allowed to use a calculator.



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THE FOLLOWING YEAR LEVELS SHOULD SIT THIS PAPER:

Australia	Year 5
Brunei	Primary 5
Egypt	Year 5
Hong Kong	Primary 5
Indian Subcontinent ¹	Class 5
Indonesia	Year 6
Malaysia	Standard 5
Middle East ²	Class 5
New Zealand/Pacific ³	Year 6
Singapore	Primary 4
Southern Africa ⁴	Grade 5

1 Indian Subcontinent Region: India, Sri Lanka, Nepal, Bhutan and Bangladesh.

2 Middle East Region: United Arab Emirates, Qatar, Kuwait, Saudi Arabia, Bahrain, Omari, Turkey, Lebanon, Tunisia, Morocco, Libya, Algeria, Jordan and Pakistan.

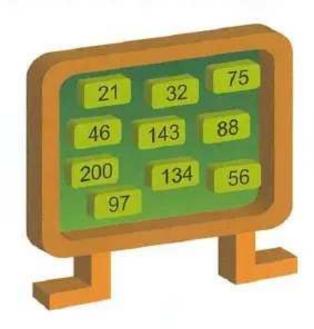
3 Pacific Region: Vanuatu, Papus New Guinea and Fiji. 4 Southern Africa Region: South Africa, Botswana, Lesotho, Swaziland, Zimbabwe and Namibis.

PRIMARY





1. Rosie has some tiles on a board.



Each tile has a number on it.

How many of these numbers are odd?

- (A) 4
- (B) 6
- (C) 8
- (D) 10
- Cai wrote down a number pattern.

97

93

?

85

81

What number should ? be?

- (A) 87
- (B) 88
- (C) 89
- (D) 90
- Which of these numbers has its largest digit in the tens column?
 - (A) 135
 - (B) 283
 - (C) 356
 - (D) 967

Five students are standing in a park.



Mark is facing Sue.

Who is standing behind Mark?

- (A) Ted
- (B) Sue
- (C) Jack
- (D) Adam
- Kimi decided to start fishing at the morning high tide. She looked up the times for low tide and high tide that day.

MONDAY 6 JUNE

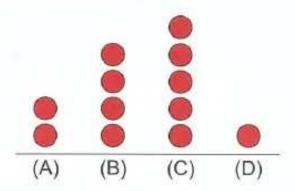
LOW	3:10 am 0.18 m	ĺ
HIGH	9:01 am	
	1.30 m	
LOW	2:40 pm	
	0.33 m	
HIGH	9:30 pm	
	1.71 m	

At what time should Kimi start fishing?

- (A) 3:10 am
- (B) 9:01 am
- (C) 2:40 pm
- (D) 9:30 pm

6. Lulu asked 12 friends what they had for lunch. She recorded the results as a dot plot. Two more friends had rice than salad.

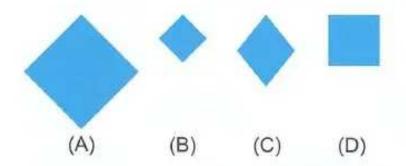
> Which column shows the number of friends who had salad?



7. Toma had this card.



Which of these cards is identical to Toma's card?

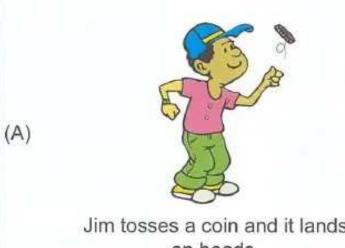


What is the mass shown on the scale? 8.



- 4.75 kilograms (A)
- 4.25 kilograms (B)
- 3.75 kilograms (C)
- 3.25 kilograms (D)

9. Which of these is almost certain to happen?



Jim tosses a coin and it lands on heads.

(B)

Sasi turns the page on the calendar and the next day is Friday.

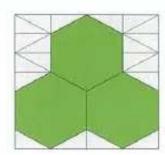
(C)

Mary flicks the spinner and it lands on 3.



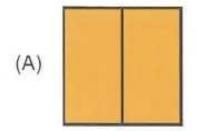
Harry picks the green jellybean without looking.

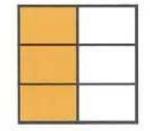
 Lani drew three hexagons on triangular grid paper and shaded them green.

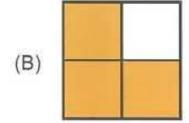


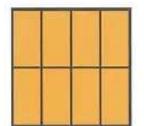
How many triangles did Lani shade?

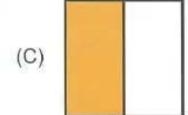
- (A) 18
- (B) 20
- (C) 30
- (D) 36
- 11. Which of these pictures shows $1\frac{3}{4}$ shaded squares?

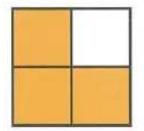


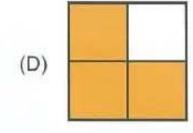


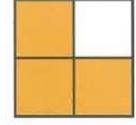




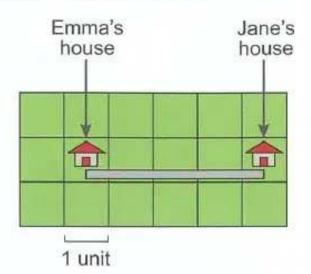






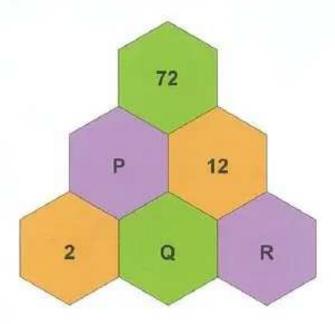


 The entrance to Emma's house is 200 metres from the entrance to Jane's house as shown.



What does 1 unit on the map represent?

- (A) 20 metres
- (B) 25 metres
- (C) 40 metres
- (D) 50 metres
- To obtain the number in each hexagon, Holly multiplied the numbers in the two hexagons directly below it.



What are the values of P, Q and R?

	P	Q	R
(A)	6	3	4
(B)	8	3	4
(C) (D)	6	4	3
(D)	8	4	3

14. Gina had a compass.



Gina followed these directions in order:

- turn west and walk 10 metres
- turn north and walk 20 metres
- turn east and walk 40 metres
- turn south and walk 20 metres.

How far was Gina from her starting point?

- (A) 10 metres
- (B) 20 metres
- (C) 30 metres
- (D) 40 metres

15. Toby had a playlist with 6 songs.

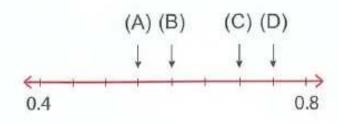
	Track	Time	
		minutes	seconds
>	Song 1	2	: 30
>	Song 2	1	: 50
>	Song 3	2	: 50
	Song 4	1	: 40
	Song 5	4	: 20
	Song 6	7	: 10

He played the songs in order from the start of Song 1, without pausing.

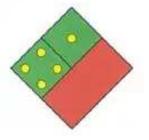
Which song was playing exactly 7 minutes after Toby started the playlist?

- (A) Song 3
- (B) Song 4
- (C) Song 5
- (D) Song 6

16. Where is 0.7 on this number line?

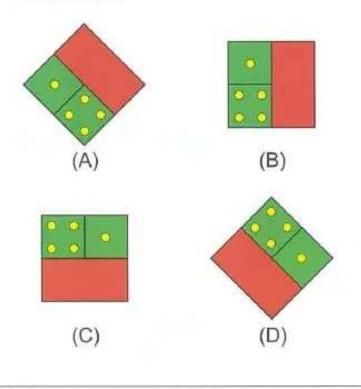


17. Janice drew this shape.



Janice rotated it anticlockwise by a quarter of a turn.

Which of these shows the shape after this rotation?



18. Which two numbers differ by 43?

- (A) 28 and 71
- (B) 38 and 71
- (C) 28 and 75
- (D) 38 and 75

19. There are 9 marbles in this bag.



KEY

B = blue

G = green

R = red

Y = yellow

Tom took out a green marble leaving 8 marbles in the bag.

Then it was Julie's turn to take out a marble without looking.

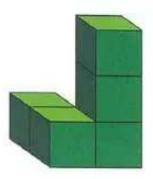
Which two colours does Julie have the same chance of taking out?

- (A) yellow and red
- (B) green and red
- (C) green and yellow
- (D) red and blue
- In a small wildlife park, one-quarter of the animals are snakes and the rest are lizards or birds. There are 70 snakes in the wildlife park.

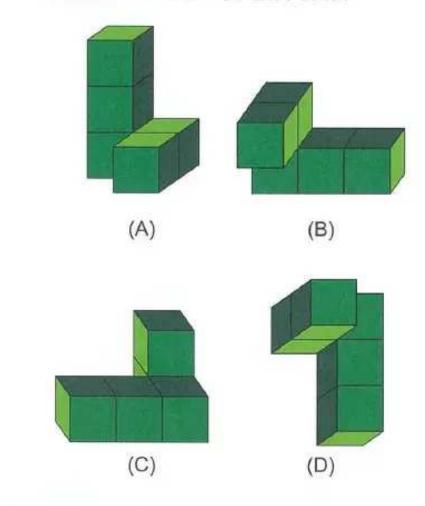
How many lizards and birds are there?

- (A) 70
- (B) 140
- (C) 210
- (D) 280

21. Lin made this solid using five cubes.



Which of these is NOT Lin's solid?



 Ardi, Priya and Raj took turns to paint their house. The house painting began at 7 am and finished at 11 pm without a break.

> Priya painted for one-quarter of the time. Ardi painted for the same amount of time as Raj.

How long did Raj spend painting the house?

- (A) 12 hours
- (B) 6 hours
- (C) 4 hours
- (D) 3 hours

Emma is making a pattern of diamonds 23. using small triangles.



Shape 1 2 triangles

Shape 2 8 triangles





Shape 3 18 triangles

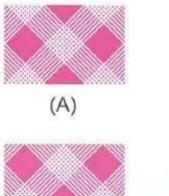
Shape 4

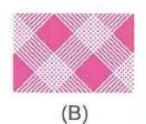
How many small triangles will she need to make the 4th shape in her pattern?

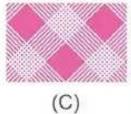
- (A) 32
- 28 (B)
- (C) 25
- 22 (D)
- Lynne cut a piece out of this square. 24.

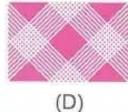


Which of these is the cut-out piece?









25. There are 12 animal signs in the Chinese calendar. They repeat every 12 years in the same order. For example, people born in 1955 or 1967 were born in the 'Year of the Goat'.



the Rooster

the Dog

Cai turned 35 on 20 April 2017.

In which 'Year' was he born?

- Year of the Dog (A)
- (B) Year of the Goat

(D)

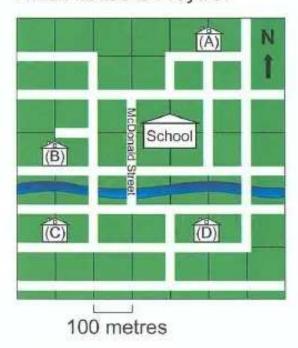
(C) Year of the Rooster

Year of the Monkey

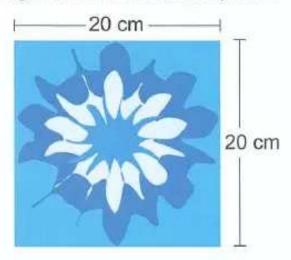
Freya left this note with the directions to her house.

Leave school, turn left onto
McDonald Street and walk to
the end. Turn right and walk
100 metres. Turn left and walk
100 metres then turn right and
walk 100 metres. My house is
the white one.

Which house is Freya's?



 Josh wants to make a quilt for his bed using a number of these squares.



The rectangular quilt must cover his bed measuring 80 cm by 200 cm and have an extra 20 cm on all four sides.

How many squares does Josh need to make the quilt?

- (A) 40
- (B) 44
- (C) 68
- (D) 72

28. Fadi only had from 3:40 pm until 5:25 pm to see a movie with his friends.

This was the movie timetable.

Return of the Snowman

Length: 2 hours 10 minutes Showing 3:40 pm and 5:50 pm

Flying Home

Length: 1 hour 20 minutes Showing 3:20 pm and 4:05 pm

Wally the Watchmaker

Length: 1 hour 45 minutes Showing 3:30 pm and 5:20 pm

The Secret Door

Length: 1 hour 40 minutes Showing 3:50 pm and 4:55 pm

Fadi and his friends watched one complete movie together.

Which movie did they watch?

- (A) Return of the Snowman
- (B) Flying Home
- (C) Wally the Watchmaker
- (D) The Secret Door

 Debbie used the digits 4, 7 and 8 to make 2-digit numbers. For example, 47 and 88 were two of the nine numbers that Debbie made.

How many of these 2-digit numbers are divisible by 3?

- (A) 1
- (B) 2
- (C) 3
- (D) 4

What is value of \(\infty ?

- (A) 18
- 24 (B)
- (C) 30
- 36 (D)
- 31. There are 24 students in Mr Sim's class.

Four students play two sports. All other students play only one sport.

Mr Sim is making a table to show the number of students who play each sport.

Sport	Number
Tennis	
Soccer	8
Volleyball	5
Basketball	?

One-quarter of the students play tennis.

How many students in Mr Sim's class play basketball?

- (A) 9
- 8 (B)
- (C) 6
- 5 (D)

32. Dani is a baker.

> She started with 1 gram of yeast. The amount of yeast doubled every 12 hours.

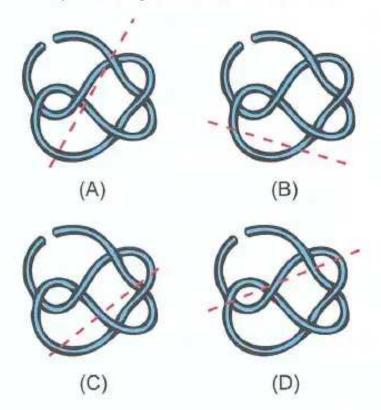
How much yeast was there after 48 hours?

- (A) 4 grams
- (B) 8 grams
- 16 grams (C)
- (D) 24 grams
- Aditya had this tangled piece of wool. 33.



He cut the wool into 7 pieces using one straight cut.

Which of the following diagrams shows the path Aditya took to cut the wool?



34.

- (A) ▲=2 ☆=6
- (B) ▲=3 ☆=6
- (C) ▲=3 ☆=5
- (D) **A** = 4 **A** = 5
- Mike makes advertising signs. The length is always twice the height.

This picture shows the most popular size.

6 m



A customer wants Mike to make a sign with a perimeter of 42 metres.

What are the dimensions of this sign?

- (A) 5 metres and 16 metres
- (B) 7 metres and 14 metres
- (C) 6 metres and 7 metres
- (D) 14 metres and 28 metres

36. Raj went shopping.

On Monday he spent half of his money.

On Tuesday he spent one-quarter of his remaining money.

He was left with \$18.

How much money did Raj begin with?

- (A) \$48
- (B) \$72
- (C) \$108
- (D) \$144
- Carol is making greeting cards using these images.

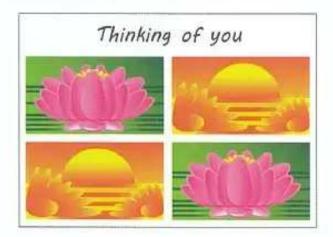




Each image is

- placed the same way up
- · put in one of four positions
- used twice in her design.

This is one possible greeting card.



How many different greeting cards can Carol make?

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

38. Four luggage bags were weighed.

Bags	Total mass (kilograms)
bag 1, bag 2, bag 3	70
bag 1, bag 3, bag 4	75
bag 1, bag 2, bag 3, bag 4	100

What was the total mass of bag 1 and bag 3?

- (A) 25 kilograms
- (B) 30 kilograms
- (C) 45 kilograms
- (D) 55 kilograms
- There are 48 boxes of tissues in a carton.
 Inside each box are 100 tissues.

Each person, in an office of 50 people, uses an average of 3 tissues per day.

How long would it take these 50 people to use 9 cartons of tissues?

- (A) 32 days
- (B) 72 days
- (C) 210 days
- (D) 288 days

 Lien folded this net to make a 12-sided dice.

He placed it on the table so that 12 was showing on top.

Which face was on the bottom?

