

KING'S COLLEGE SCHOOL WIMBLEDON

> II+ for 2022 entry Pre-test for 2024 entry Specimen Paper 2022

MATHEMATICS

50 minutes to complete **both** Section A **and** Section B

SECTION B

You are advised to spend approximately 30 minutes on this section.

- I. Do all your written work on this question paper.
- 2. Calculators must not be used.
- 3. Attempt all questions in Section B.

Surname:

First names:

QUESTION I

(i) Work out 273 x 23.

(ii) Work out 595 ÷ 17.

(iii) Write down two multiples of 2001.

(iv) Write down two factors of 2001.

(v) Find the cost of 31 litres of petrol at 81p per litre.

Answer:_____ Answer:_____ Answer: Answer:_____ Answer: _____ Answer:_____

Answer:_____

(vi) In a 'third off' sale a bike is sold for £114.How much would it have sold for before the sale?

QUESTION 2

(i) In 25 minutes, through what angle does the minute hand of a clock pass?

		Answer:				
(ii)	In the Calcul	diagram AB is a straight line. ate the value of angle a°. A A B Answer: a° =				
(iii)	A square has a perimeter of 96cm.					
	(a)	Calculate the length of one side.				
		Answer: length =				
	(b)	Find the area of the square. Answer: area =				
	(c)	Give a sketch, not to scale, of a rectangle, showing the length of its sides, which has the same area as the square.				
		Answer: length =				
	(d)	Find the perimeter of your rectangle.				
	Answer: perimeter =					

QUESTION 3

The pie chart shows the favourite colour of some boys.



(a) Calculate the value of x.

Red is the favourite colour of 126 boys.

- (b) Calculate the number of boys whose favourite colour is:
 - (i) green.

(ii) yellow.

(iii) not blue.

(c) Calculate the total number of boys.

Answer: _____

Answer:_____

Answer:_____

Answer:_____

Answer:_____

QUESTION 4

Here is a pattern of numbers.

Row I:I	+	2 ²	=	5
Row 2:2	+	3 ²	=	11
Row 3:3	+	4 ²	=	19

(a) Write out the next two rows.

Answer: Row 4:

Answer: Row 5:

(b) Write out Row 9.

Answer: Row 9:

(c) Write out Row 49.

Answer: Row 49:

(d) Find the row which ends 419.

Answer:_____

(e) What is the general rule to describe each row if you call the row number n ?

Answer:_____

NOW GO BACK AND CHECK YOUR WORK

BLANK PAGE

BLANK PAGE

BLANK PAGE