KING'S COLLEGE SCHOOL WIMBLEDON

> II+ for 2023 entry Pre-test for 2025 entry Mathematics



# SPECIMEN PAPER

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

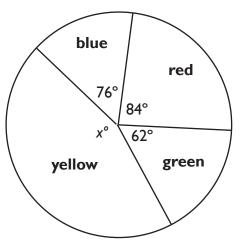
## **QUESTION 2**

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

		Answer:	
(ii)		diagram AB is a straight line. ate the value of angle a°. <b>A</b> <b>A</b> <b>B</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 <sup>2</sup> =	5
Row 2:2 + 3 <sup>2</sup> =	:
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

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