Cambridge Primary Progression Test

Question paper

Cambridge Primary

45 minutes

Mathematics Paper 2

Stage 6

Name .....

Additional materials: Ruler
Calculator
Protractor
Tracing Paper

READ THESE INSTRUCTIONS FIRST

Answer **all** questions in the spaces provided on the question paper.

You should show all your working on the question paper.

The number of marks is given in brackets [ ] at the end of each question or part question.

The total number of marks for this paper is 40.

For Teacher's Use	
Page	Mark
1	
2	
3	
4	
5	
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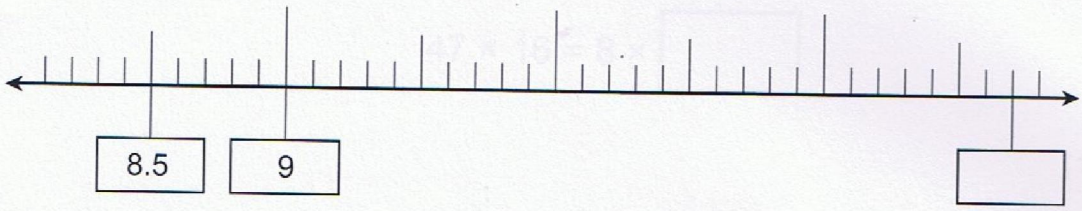
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
Total	

V1

UNIVERSITY of CAMBRIDGE
International Examinations

For Teacher's Use

1 Here is part of a number line.



What number goes in the empty box?

..... [1]

2 Here are four numbers.

40 004 400 400 400 004 400 040

Put a ring round the number that is one hundred times bigger than four thousand and four.

[1]

3 Here is part of a number square.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30

Here is another part of the same number square.
Put a ring round the largest number that is a multiple of both 2 and 9

81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

[1]

For Teacher's Use

4 Complete the following number sentence.

$$47 \times 16 = 8 \times \square$$

[1]

5 Here is a place value chart showing the number 82

10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9

Here is a larger place value chart.

Shade it to represent the number $301\frac{3}{100}$

1000	2000	3000	4000	5000	6000	7000	8000	9000
100	200	300	400	500	600	700	800	900
10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9
0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009

[1]

For Teacher's Use

6 Here are some statements about odd and even numbers.

Tick (✓) the correct box next to each statement.

	True	Not true
odd × odd = odd		
odd + odd = even		
odd – odd = odd		

[1]

7 Cesar has 10 cubes in a bag.
Each cube is either red or blue.

He takes a cube without looking.
It is **equally** likely that he will take a red cube or a blue cube.

How many red cubes are in the bag?

..... red cubes [1]

8 How much less than 10 000 is 99 × 101?

..... [1]

For Teacher's Use

9 Here are four number cards.

0	17	27	37

Isabella chooses two different cards.
She adds the numbers together and rounds her answer to the **nearest 10**
Her answer is 50

Which **two** number cards did she choose?

..... [1]

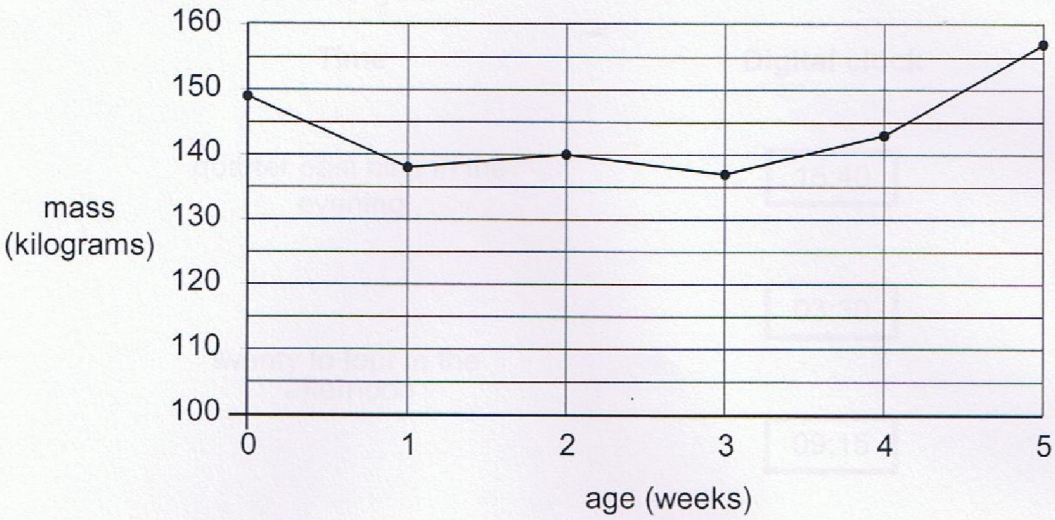
10 What is half a litre in millilitres?

..... ml [1]

[Turn over

11 Here is a graph showing the mass of a baby elephant.

For Teacher's Use



(a) What was the mass of the elephant when it was 2 weeks old?

..... kg [1]

(b) When did the elephant grow the fastest?
Put a ring round the answer.

0 to 1 week 1 to 2 weeks 2 to 3 weeks 3 to 4 weeks 4 to 5 weeks

[1]

For Teacher's Use

12 Match the times to the digital clocks.
One has been done for you.

Time	Digital clock
quarter past nine in the evening	15:40
	03:30
twenty to four in the afternoon	
	09:15
twenty past eight in the morning	08:20
	21:15
half past three in the afternoon	
	15:30

[2]

13 Here are five examples of calculation strategies.
Some are correct and some are wrong.

Mark each example with a tick (✓) if it is correct and a cross (×) if it is wrong.

Calculation	Strategy	✓ or ×
5.7 + 3.9	5.7 + 4 – 0.1	
13.1 + 2.8	13.1 + 3 + 0.8	
6.8 – 4.9	6.8 – 5 + 0.1	
13.5 – 2.1	13.5 – 2 + 0.1	

[2]

For Teacher's Use

14 Here are the four operation signs.

$+$ $\quad -$ $\quad \times$ $\quad \div$

Write in the missing signs. The first one has been done for you.

$4 \ (\times) \ 5 = 30 \ (-) \ 10$

$15 \ (\ ) \ 6 = 3 \ (\ ) \ 7$

$3 \ (\ ) \ 2 > 15 \ (\div) \ 3$

[2]

15 Erik knows the following facts.

$90 \times 17 = 1530$	$7 \times 17 = 119$

Show how he can use **these facts** to work out 83×17
You must show the method **and** the result.

.....

[2]

For Teacher's Use

16 Complete the table showing equivalent fractions and decimals.
The first one has been done for you.

Fraction	Decimal
$\frac{1}{2}$	0.5
$\frac{3}{5}$	
$\frac{3}{4}$	

[2]

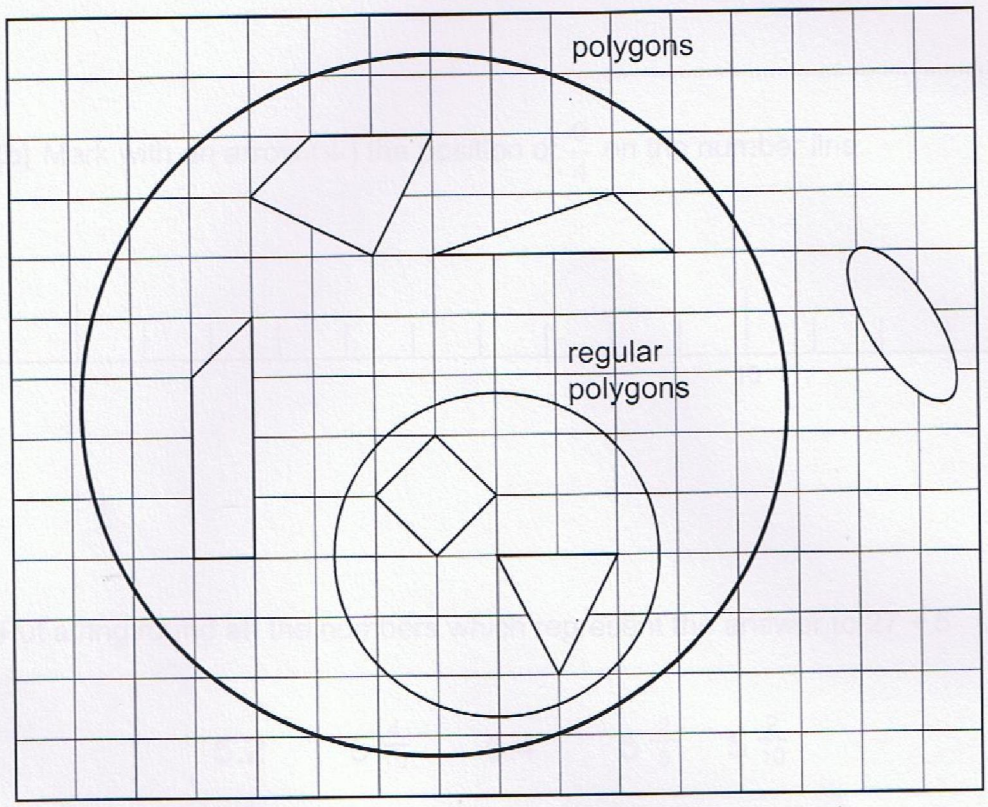
17 What is $\frac{7}{10}$ of 70?

..... [1]

For Teacher's Use

18 Here is a diagram for sorting shapes.
One shape is in the **wrong** place.

Shade the shape that is in the wrong place.



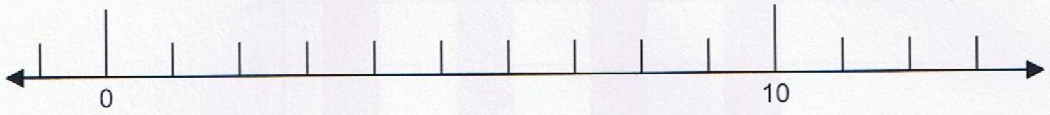
[1]

For Teacher's Use

19 **(a)** Write $\frac{9}{4}$ as a mixed number.

..... [1]

(b) Mark with an arrow (↓) the position of $\frac{9}{4}$ on the number line.



[1]

20 Put a ring round **all** the numbers which represent the answer to 27 ÷ 5

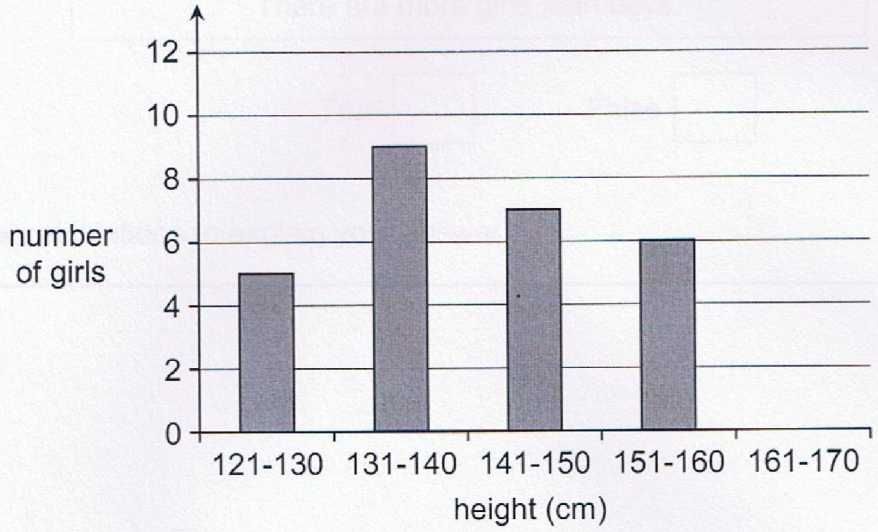
5.2 $5\frac{4}{10}$ 5.4 $5\frac{2}{5}$ $5\frac{2}{10}$

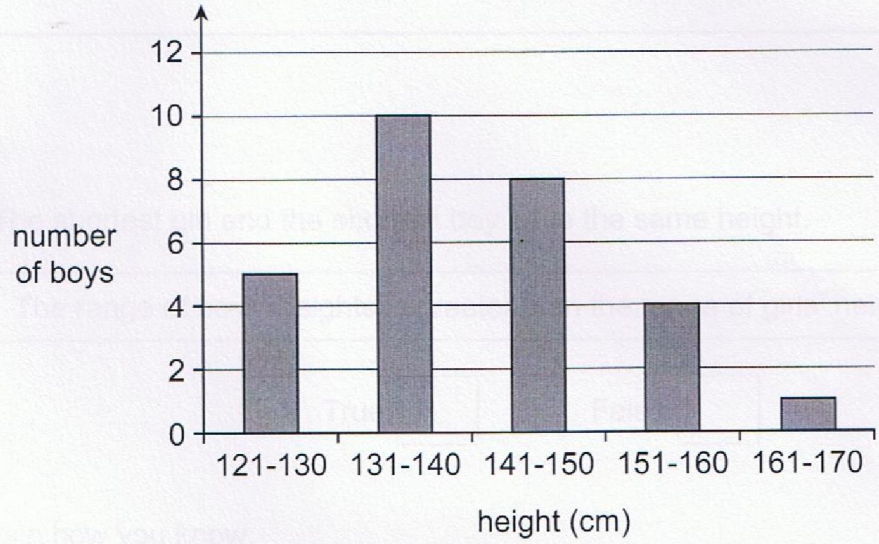
[1]

[Turn over

21 A group of girls and boys were measured and their heights recorded to the nearest centimetre. The results are shown on the graphs.

For Teacher's Use





Use the graphs to decide whether these statements are **true** or **false**.
Tick (✓) your answer.

For Teacher's Use

(a) There are more girls than boys.

True ☐ False ☐

Show calculations to explain your answer.

[1]

(b) The shortest girl and the shortest boy have the same height.

The range of boys' heights is greater than the range of girls' heights.

True ☐ False ☐

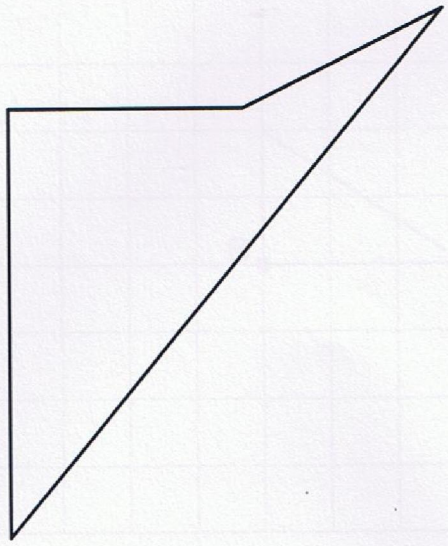
Explain how you know.

.....

..... [1]

22 Here is a quadrilateral.

For Teacher's Use



(a) Measure the length of the longest side.

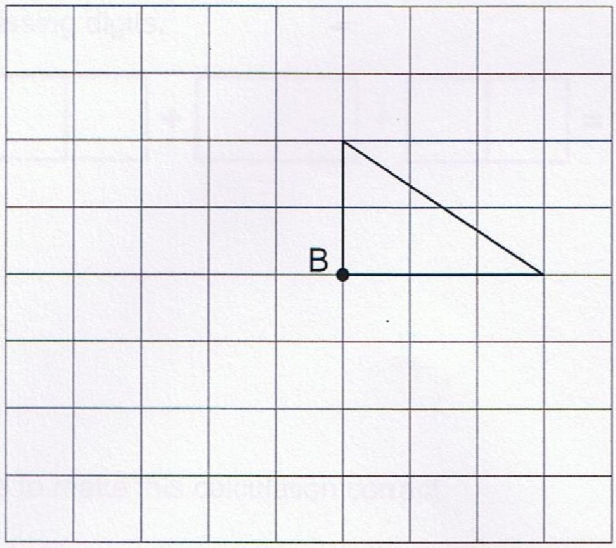
..... cm [1]

(b) Measure the size of the smallest angle.

..... ° [1]

For Teacher's Use

23 Here is a triangle on a grid.



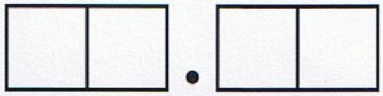
It is rotated about the point B through 90° clockwise.

Draw the new position of the triangle on the grid.

[1]

24 Here are four digit cards.

Use each digit card once to make the number closest to 30

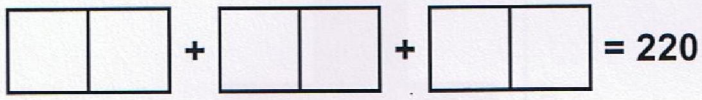


[1]

For Teacher's Use

25 Each missing digit in this sum is a 4 or an 8

Write in the missing digits.



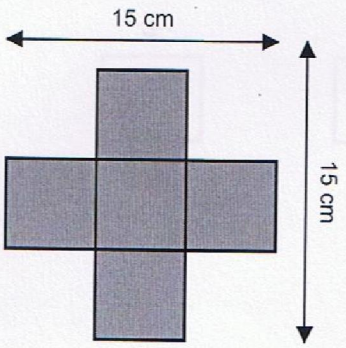
[1]

26 Put in brackets to make this calculation correct.

$$1.1 + 1.2 - 1.3 \times 1.4 = 1.4$$

[1]

27 This shape is made from five identical shaded squares.



NOT TO SCALE

Find the **perimeter** of the shaded shape.
Show your working.

..... cm

[2]

28 What is the mean of these five numbers?

5.2 1.9 3.4 2.1 2.4

..... [1]

For Teacher's Use

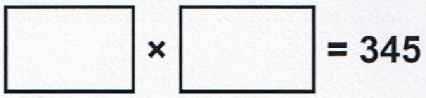
29 Write a number in each box so that the **mode** of the five numbers is 8

For Teacher's Use

[1]

30 Two **whole numbers** are each between 10 and 30
Their product is 345

Write in the missing numbers.



[1]