CANDIDATE NAME

CENTRE NUMBER

CANDIDATE NUMBER

MATHEMATICS **0845/01**

Paper 1 **For Examination from 2014**

SPECIMEN PAPER

45 minutes

Candidates answer on the Question Paper.

Additional Materials: Pen   Protractor
                     Pencil
                     Ruler

READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name in the spaces at the top of this page.
Write in dark blue or black pen.

Answer **all** questions.

Calculators are **not** allowed.

The number of marks is given in brackets [ ] at the end of each question or part question.
You should show all your working in the booklet.
The total number of marks for this paper is 40.

This document consists of **16** printed pages.

IB 14 05_0845_01/2RP
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CAMBRIDGE
International Examinations

[Turn over

1 Calculate

$$423 - 298 =$$

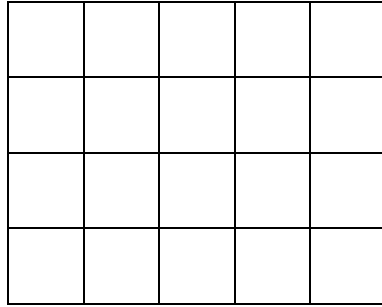.. [1]

2 Fatima has 72 oranges.

Four oranges are needed to make a glass of freshly squeezed orange juice.
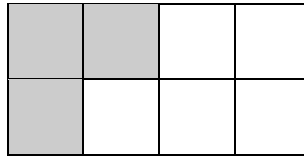
How many glasses of orange juice can she make?

.... glasses [1]

3 **(a)** Shade $\frac{2}{5}$ of the shape.

[1]

(b) What fraction of the shape below is shaded?

.... [1]

 [Turn over

4   The Venn diagram shows information about the children in a Grade 6 class.

blue eyes

walk to school

1

5

6

2

4

6

3

boys
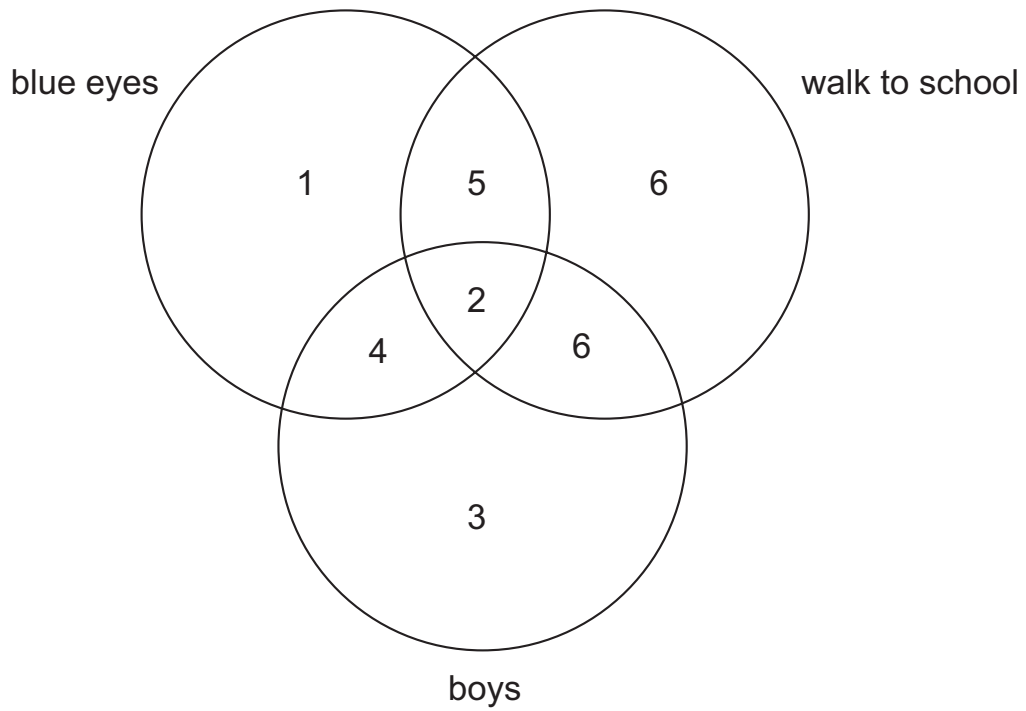
How many children in this class walk to school?

.... children   [1]

5

5   Here is a number fact.

$$14 \times 37 = 518$$

Use this fact to decide whether these calculations are true or false.

518 ÷ 37 = 14   True ☐   False ☐

37 ÷ 518 = 14   True ☐   False ☐   [1]

6   Write **all** the missing numbers in this multiplication grid.

×			
	42	48	54
	49		63
8		64	72

[2]

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7   A box contains 30 chocolates.

How many chocolates are in 6 of these boxes?

.... chocolates   [1]

8   Draw a line 68 mm long.

You must use a ruler.

[1]

9   Fatima is thinking of a number.

She says

Double my
number is 14.4
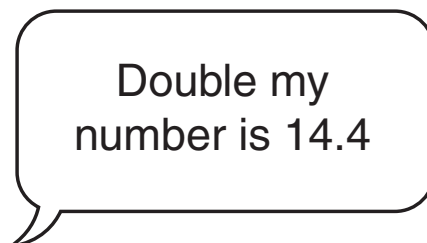
What number is Fatima thinking of?

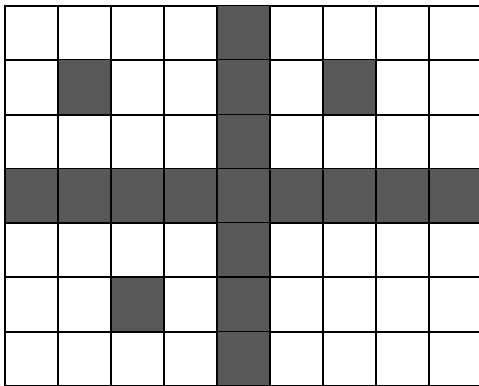.. [1]

10 The point (2, 3) is plotted below.
Plot **three** more points whose co-ordinates have a sum of 5.
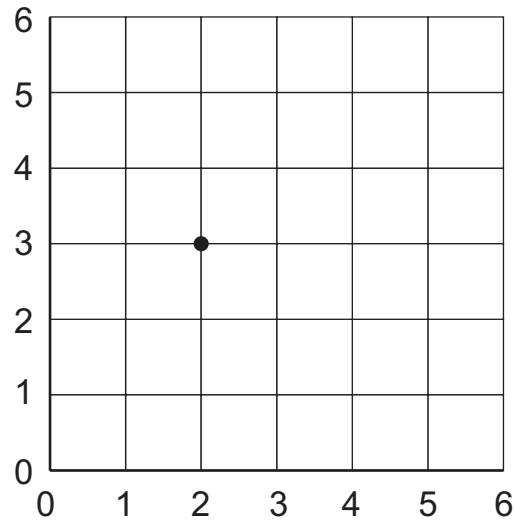
[1]

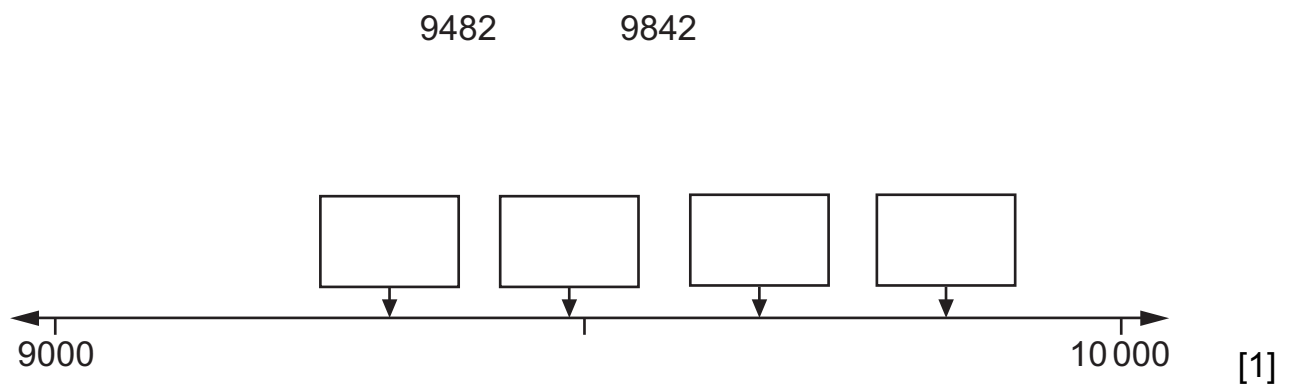**11** Shade 5 more squares so that this shape has 2 lines of symmetry.

[1]

12 Write these fractions in their simplest form.

$$\frac{6}{12} = \text{...}$$

$$\frac{12}{15} = \text{.......................................}$$ [1]

13 Write each number in its correct box to show its position on the number line. You will not need all of the boxes.

9482   9842
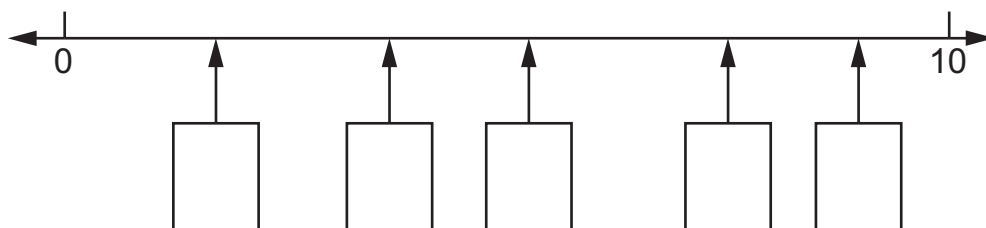

9000   10 000   [1]

14 Here are three mixed numbers.

$$5\frac{1}{4} \qquad 7\frac{1}{2} \qquad 3\frac{3}{4}$$

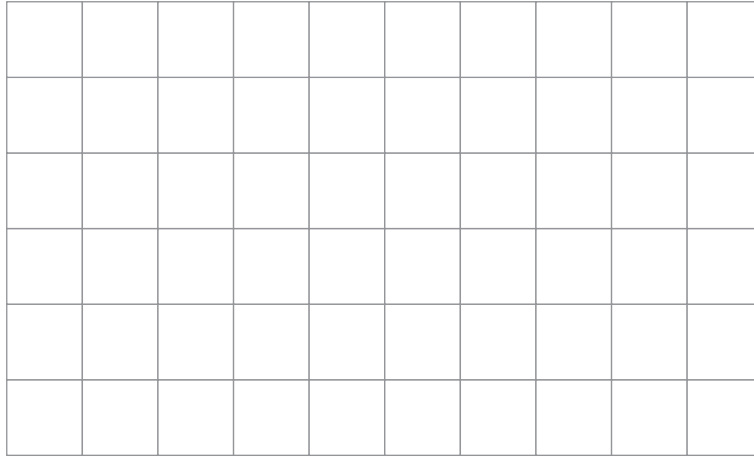Write each number in its correct box on the number line.
You will not need all of the boxes.

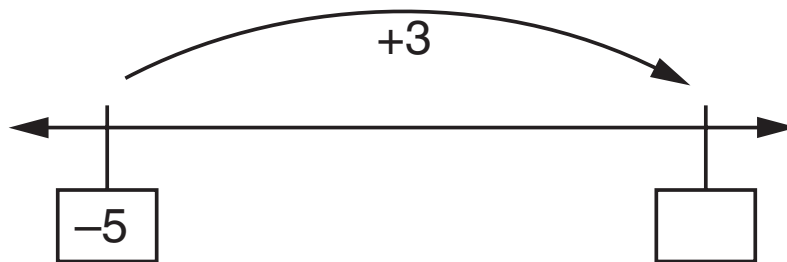0   10

[2]

15 Here is a 1 cm^2 grid.
Draw a rectangle with a perimeter of 12 cm.

[1]

16 What is the missing number?

+3

−5

[1]

 [Turn over

17 A sequence starts at 300 and 40 is subtracted each time.

$$300 \quad 260 \quad 220 \quad 180\ldots\ldots$$

The sequence continues in the same way.

What is the first number in the sequence which is less than zero?

.... [1]

18 Draw a ring around **all** the numbers that are factors of 42

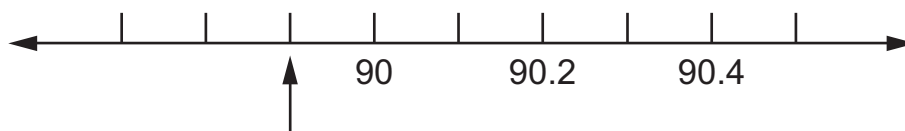$$1 \qquad 2 \qquad 3 \qquad 4 \qquad 5 \qquad 6 \qquad 7$$

[1]

19 Write in the missing number.

$$0.85 + \boxed{} = 1$$

[1]

20 What number is the arrow pointing to on this number line?

.... [1]

21 Draw a ring around **all** the numbers which are multiples of 25

250   730   675   380   55   [1]

22 **(a)** Calculate.

400 × 70

.... [1]

(b) Here is a number fact.

18 × 5 × 6 = 540

Use this to work out

18 × 5 × 12

.... [1]

23 Write the missing number.

7.7 —— add 0.34 ——▶ [ ]
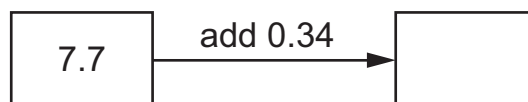
[1]

24 Here is a clock face showing a digital time.

$$23:23$$

Draw a ring around the time that is the same as that shown on the clock.

11:23 am   3:23 pm   11:23 pm

2:23 pm   3:23 am

[1]

25 John records how many points each of his friends get on sports day.
Here are the results.

15,	12,	8,	16,	11,	12,	9,
12,	15,	14,	4,	9,	12,	18,

(a) What is the mode of the points scored?

.... [1]

(b) Complete the frequency table.

	Tally	Frequency
0 – 4		
5 – 9		
10 – 14		
15 – 19		

[1]

26 At midday the temperature in Moscow was 7°C.
At midnight it was –3°C.

By how many degrees did the temperature fall?

.... °C [1]

27 (a) Here are four fractions.

$$\frac{1}{50} \qquad \frac{50}{100} \qquad \frac{100}{50} \qquad \frac{1}{5}$$

Which fraction is equivalent to 0.5?

.... [1]

(b) What is $\frac{7}{10}$ of 650?

.... [1]

28 (a) Here are the heights of some children.

134 cm   142 cm   156 cm   145 cm
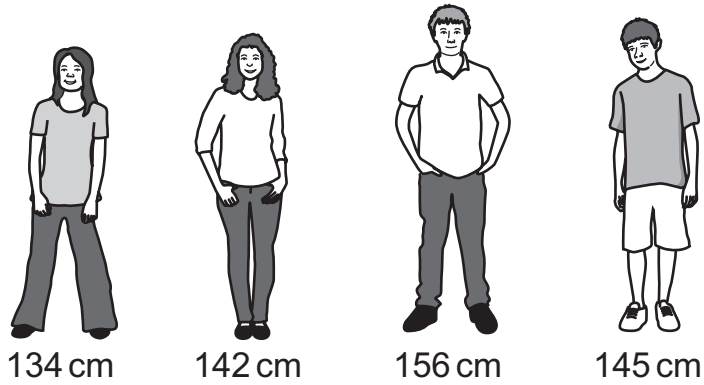
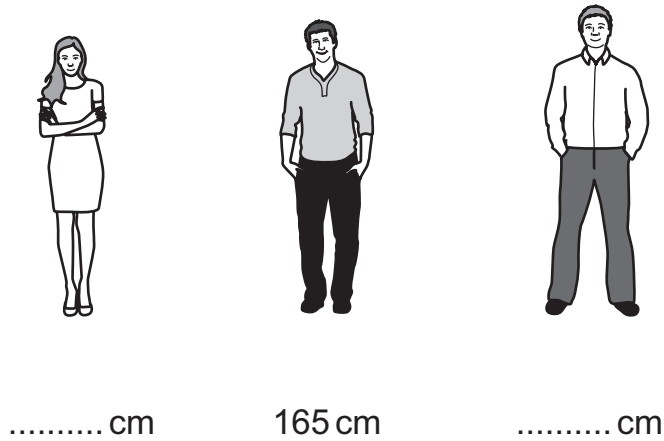Calculate the range of their heights.

.... cm   [1]

(b) The range of the heights of three adults is 17cm.

Write down possible heights of the shortest and tallest adults.

.... cm   165 cm   .... cm

[1]

29 (a) Write three **different** whole numbers in the boxes to make the multiplication correct.

The numbers must be greater than 1.

	×		×		= 60

[1]

(b) Write whole numbers in the boxes to make this division correct.

The numbers must be greater than 1.

	÷		= 60

[1]

30 Write in the missing digits to make this calculation correct.

$$
\begin{array}{cccc}
 & \boxed{} & 7 & \boxed{} \\
 & & & 6 \quad \times \\
\hline
1 & 0 & 3 & 2
\end{array}
$$

[1]

31 Here is a compound shape made from two rectangles.

NOT DRAWN
TO SCALE
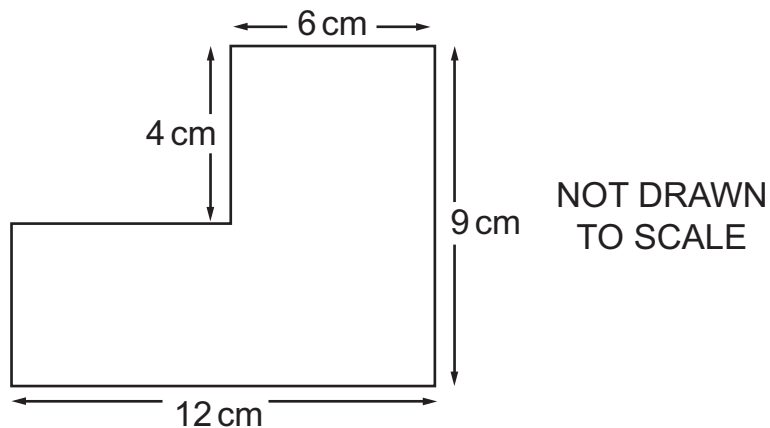
(a) Calculate the perimeter of the shape.

.... cm   [1]

(b) Calculate the area of the shape.

.... cm^2 [1]