

CANDIDATE
NAME

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CENTRE
NUMBER

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CANDIDATE
NUMBER

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MATHEMATICS

0845/01

Paper 1

October 2016

45 minutes

Candidates answer on the Question Paper.

Additional Materials:

Pen
Pencil
Ruler

Protractor
Tracing paper (optional)

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.

DO **NOT** WRITE IN ANY BARCODES.

Answer **all** questions.

NO CALCULATOR 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 **15** printed pages and **1** blank page.

1 Buttons are sold in packs of four.

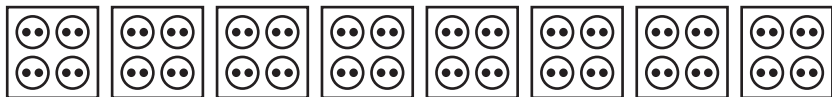


Draw a line to match each row of packs to the correct total number of buttons.


32


16

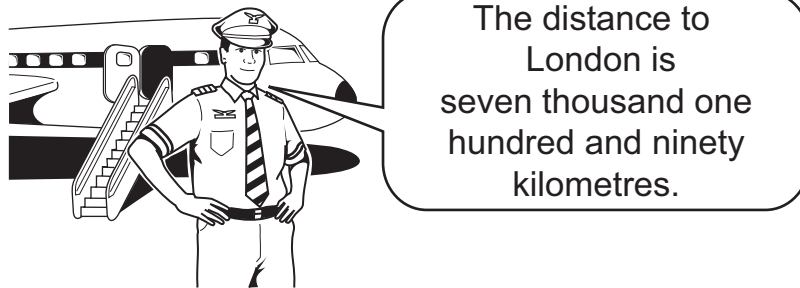

28


12

[1]

2 An aeroplane flies from Mumbai to London.

The pilot says,



Write this distance in figures.

..... km [1]

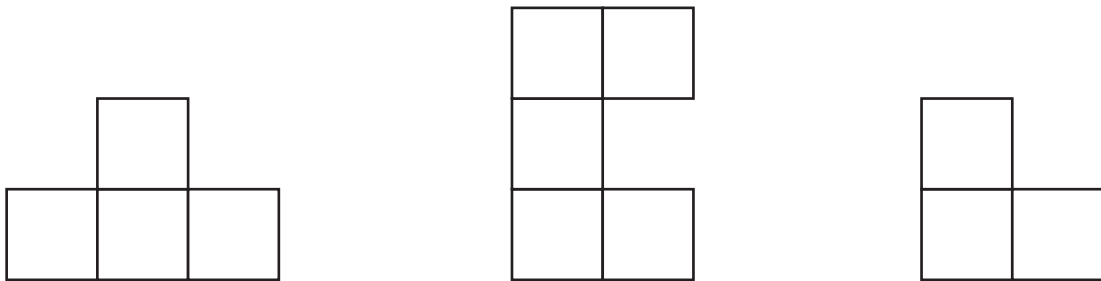
3 A bag holds 9 oranges.

Orla buys 8 bags of oranges.

How many oranges does she buy altogether?

..... oranges [1]

4 Draw the line of symmetry on each diagram.



[2]

5 Draw a ring around the number that is ten times bigger than five hundred and four.

504 514 5004 5040

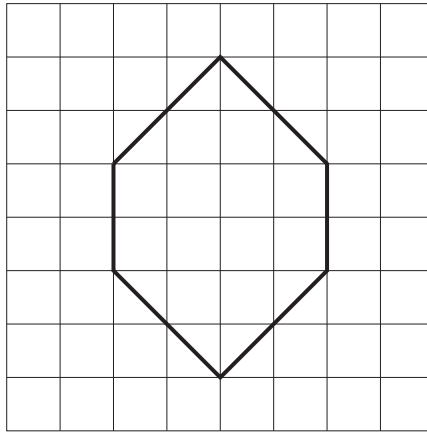
[1]

6 Write the missing number in the box.

$$3340 - \boxed{} = 2840$$

[1]

7 Here is a shape.



How many of the inside angles are right angles?

..... [1]

8 Milly has circled all the multiples of 4 on this grid.

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
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60

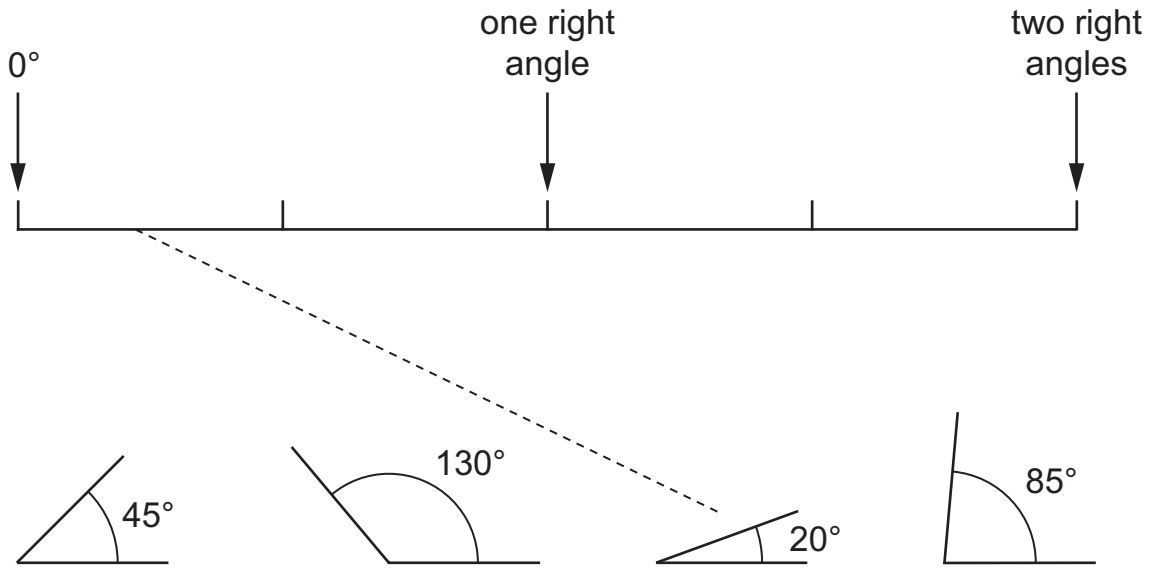
(a) **Shade** all the multiples of 5 on the grid. [1]

(b) Which of these numbers are multiples of both 4 **and** 5?

..... [1]

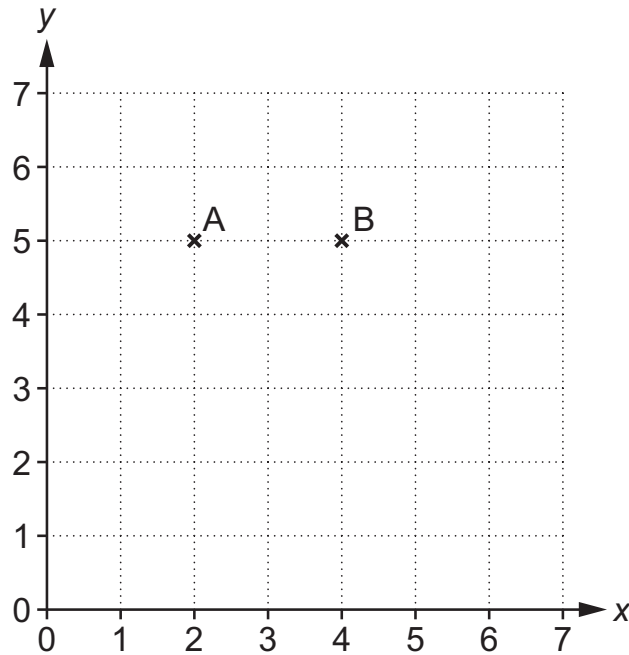
9 Draw a line to show the correct position of each angle on the line.

One has been done for you.



[1]

10 The grid shows points A and B.



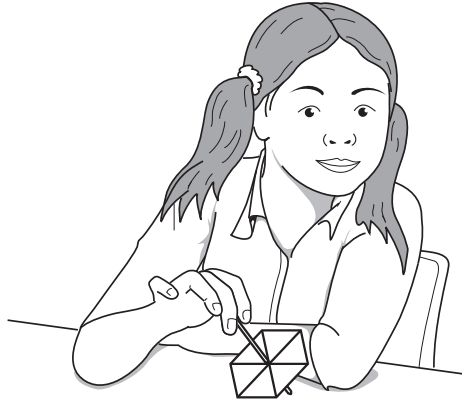
Bruno draws a rectangle ABCD on this grid.

D is the point (2, 1).

What are the co-ordinates of point C?

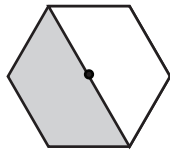
(..... ,) [1]

11 Mia has some spinners.

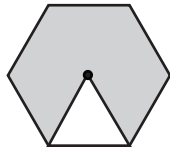


Draw a line to show the probability of each spinner landing on the shaded part.

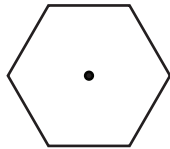
One has been done for you.



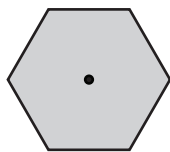
impossible



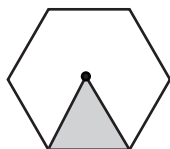
unlikely



even chance



likely



certain

[2]

12 (a) A riverboat can carry 224 passengers.

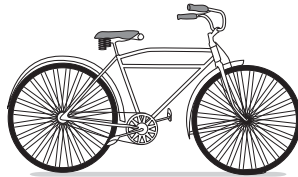


There are 137 on the boat.

How many more passengers can it carry?

..... passengers [1]

(b) Graham borrows \$126 from his father to buy a bicycle.



He pays back \$7 each week.

How many weeks will it take to pay back his father?

..... weeks [1]

(c) Work out $356 \div 100$
Give your answer as a decimal.

..... [1]

13 Complete the place value diagram.

$$63942 \longrightarrow \boxed{} + 3000 + \boxed{} + 40 + \boxed{2}$$

[1]

14 Write each of these fractions in the correct box on the number line.

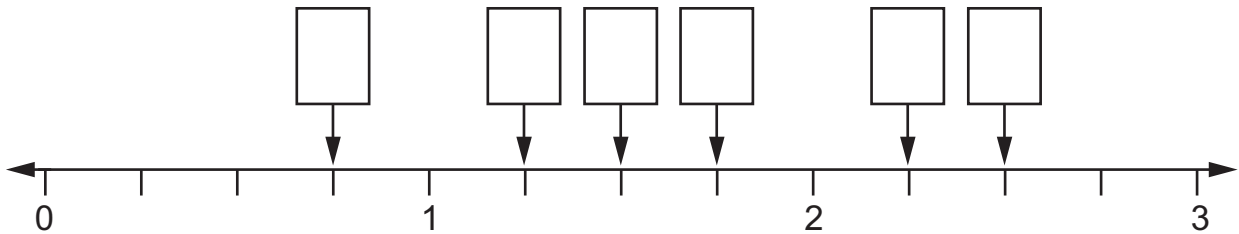
$\frac{7}{4}$

$\frac{3}{4}$

$\frac{9}{4}$

$\frac{5}{2}$

You will not need all of the boxes.



[2]

15 Judy knows that $20 \times 18 = 360$

Show how she can **use this fact** to work out the answer to 19×18

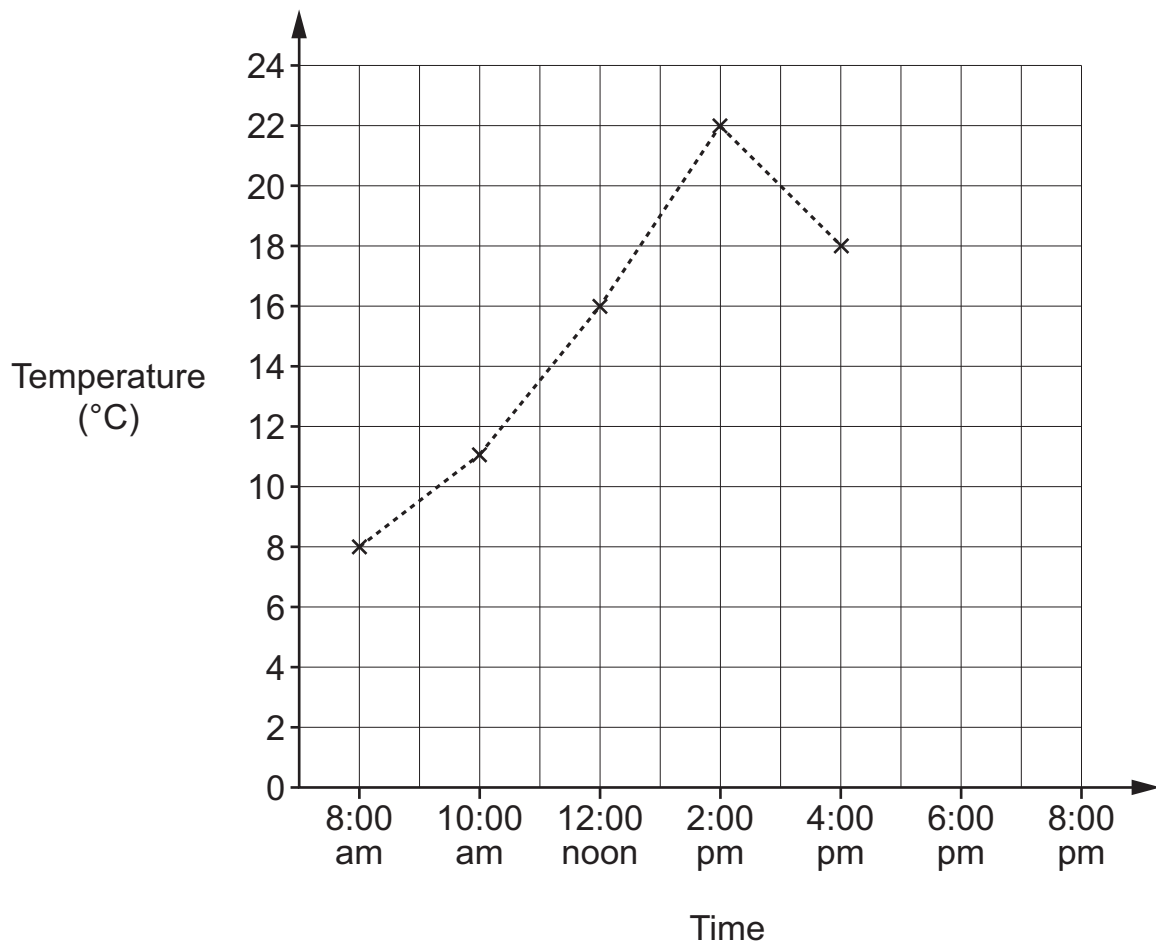
.....
 [1]

16 The temperature in a greenhouse was measured during the day.

Time	Temperature (°C)
8:00 am	8
10:00 am	11
12:00 noon	16
2:00 pm	22
4:00 pm	18
6:00 pm	15
8:00 pm	10

(a) Plot the missing data on the line graph.

[1]



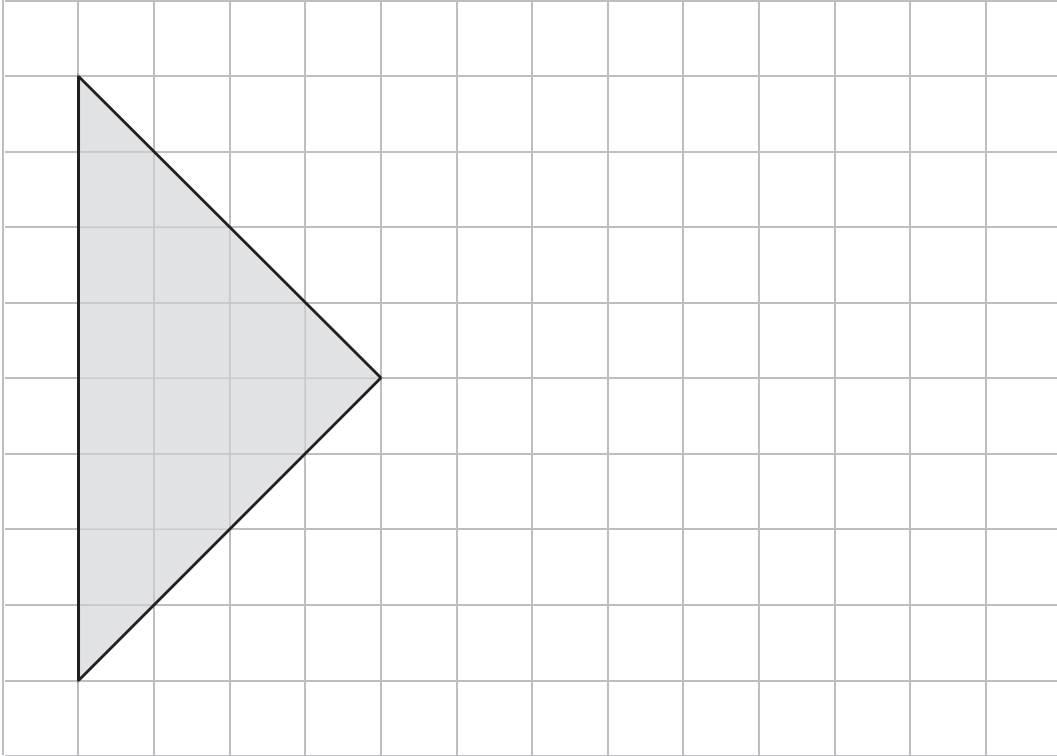
(b) Estimate the temperature at 1:00 pm.

..... °C [1]

17 Here is a shape drawn on a centimetre square grid.

Use the grid to draw a **square** with the same area.

Use a ruler.



[1]

18 Chairs are put in rows of 30 at a concert.

There are 20 rows.

How many chairs are there altogether?

.....chairs [1]

19 Join each calculation to the correct box.

$$64 \times 10$$

odd

$$37 \times 4$$

$$63 \times 7$$

even

$$14 \times 3$$

[1]

20 Here are some fractions.

$$\frac{4}{6} \quad \frac{5}{12} \quad \frac{45}{100} \quad \frac{10}{20} \quad \frac{6}{10}$$

Write each fraction in the correct place in the table.

Less than one half	Equal to one half	Greater than one half

[2]

21 Draw a ring around the two numbers that add up to 1

0.36

0.38

0.46

0.48

0.64

0.74

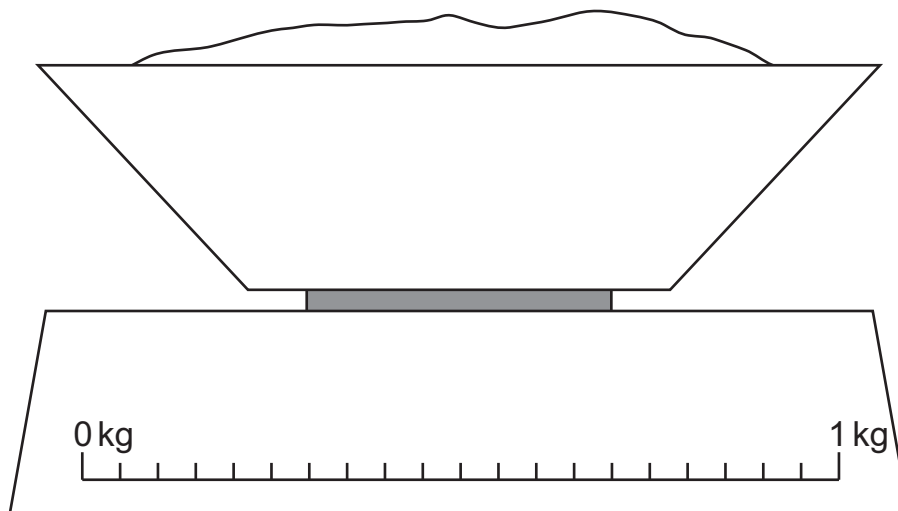
[1]

22 Write $\frac{18}{30}$ in its simplest form.

..... [1]

23 Mary weighs 650 grams of rice.

Draw an arrow (↓) on the scale to show 650 grams.



[1]

24 There were 315 passengers on a plane.

One seventh of the passengers got off in Madrid.

The rest flew on to Rome.

How many passengers flew on to Rome?

.....passengers [2]

25 Measure this line accurately in millimetres.



.....mm [1]

26 Here is a calendar for the month of October.

October						
S	M	T	W	T	F	S
		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	31		

What will the date be five weeks after October 10th?

..... [1]

27 The table shows the number of days when it rained each month.

Month	Number of days when it rained
January	21
February	14
March	12
April	14
May	10
June	9
July	11
August	14
September	20
October	23
November	24
December	22

(a) What is the mode of the data?

..... [1]

(b) What is the range of the data?

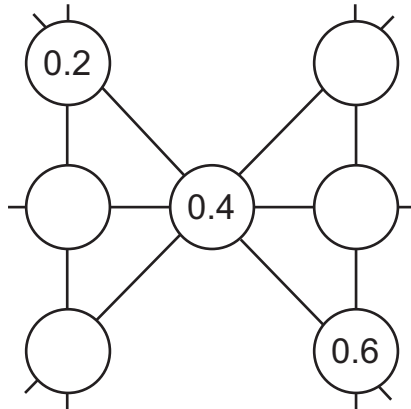
..... [1]

28 Tara has seven counters with numbers on them.



She places each one onto this diagram so that each line of 3 counters has the same total.

Complete the diagram.



[2]

29 Some of these numbers are factors of 18

Draw a ring around them.

1.8 3 9 12 18 36

[1]

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