

CANDIDATE  
NAME

--

CENTRE  
NUMBER

--	--	--	--	--

CANDIDATE  
NUMBER

--	--	--	--



**MATHEMATICS**

**0845/02**

Paper 2

**October 2015**

**45 minutes**

Candidates answer on the Question Paper.

Additional Materials:

Pen  
Pencil  
Ruler

Protractor  
Calculator  
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.

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 **14** printed pages and **2** blank pages.

1 (a) Here is a list of numbers.

23      28      33      43      46      52      59

Draw a ring around two numbers with a **total** of 74 [1]

(b) Here is a list of the same numbers.

23      28      33      43      46      52      59

Draw a ring around two numbers with a **difference** of 9 [1]

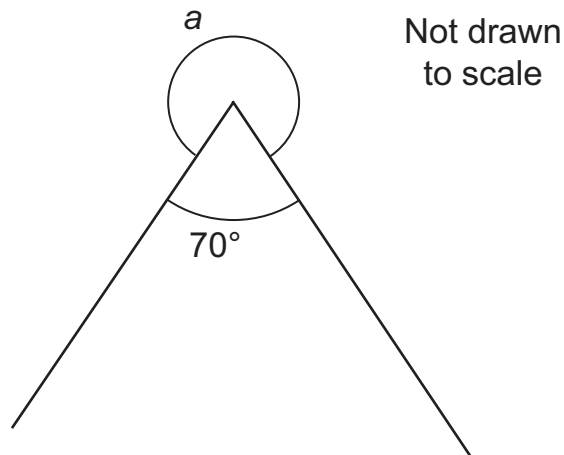
2 Write the missing numbers in each box to complete each sequence.

(a) 13,  19,  25, 28 [1]

(b) 9, 7,  3, ,  [1]

3

3 Calculate the size of angle  $a$ .



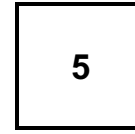
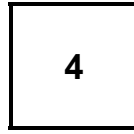
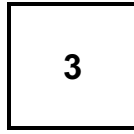
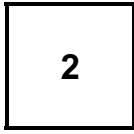
.....° [1]

4 Complete the calculation.

$$\frac{4}{10} + \frac{\square}{\square} = 1$$

[1]

5 Here are four digit cards.



Anna chooses three of these cards to write three-digit numbers.

Write **all** the three-digit numbers that Anna could make between 350 and 450

.....

.....

[2]

6 Match each calculation in a box to the correct answer.

The first one has been done for you.

$$\frac{1}{2} \text{ of } 56$$

22

23

$$\frac{1}{3} \text{ of } 78$$

24

25

$$\frac{1}{4} \text{ of } 92$$

26

27

$$\frac{1}{5} \text{ of } 125$$

28

[1]

7 Put one tick (✓) in each row to complete the table.

	Greater than $\frac{1}{2}$	Less than $\frac{1}{2}$
$\frac{3}{4}$		
0.05		
$\frac{34}{100}$		

[2]

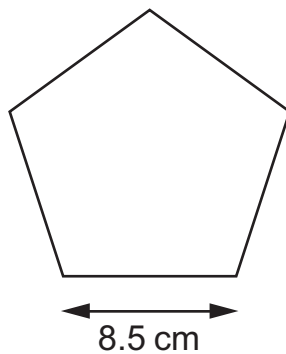
8 Put **one** of the digits 0, 1, 2 and 6 in each box to complete the calculation.

Each digit can only be used once.

$$\begin{array}{|c|c|} \hline & \\ \hline \end{array} \times \begin{array}{|c|c|} \hline & \\ \hline \end{array} = 1260$$

[1]

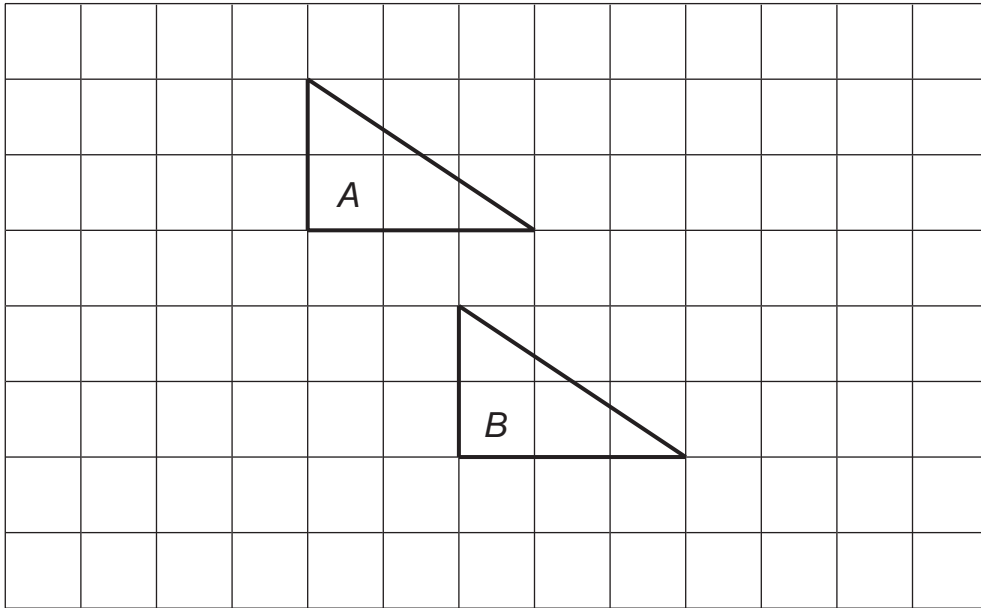
9 Find the perimeter of this regular pentagon.



Not drawn  
to scale

..... cm [1]

10 Triangles *A* and *B* are drawn on a square grid.



(a) Triangle *A* is translated 4 squares to the right and 1 square down.

Draw the triangle in its new position.

[1]

(b) Describe the translation which moves **triangle A** from its original position to triangle *B*.

..... [1]

11 Oranges are sold in bags of 6

A school needs 260 oranges.

How many bags will they need?

.....bags [1]

12 Imran starts with one and counts on in fives to give this number pattern.

1      6      11      16      21      26      31

The pattern continues in the same way.

Will he ever find a number in the five times table?

Yes       No

Explain how you know.

.....  
..... [1]

13 Aysha is counting on in steps of 0.3

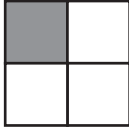
Write in the missing numbers.

0.8            1.4     

[1]

14 Match each shape to the percentage that is shaded.

One has been done for you.



25%



60%



20%

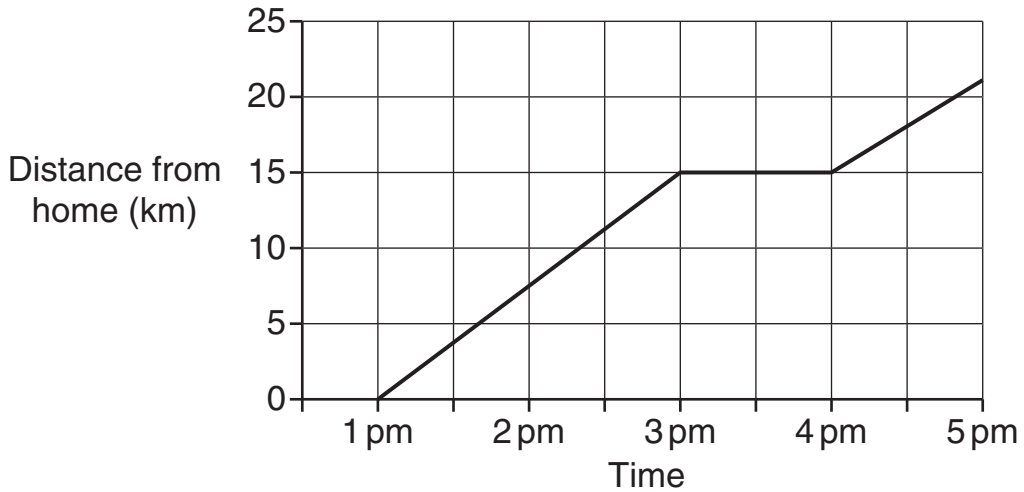


30%

[1]



15 The graph shows Hakim's cycle journey between 1 pm and 5 pm.



(a) How far does he travel between 1 pm and 3 pm?

..... km [1]

(b) What might he be doing between 3 pm and 4 pm?

.....  
 ..... [1]

16 Here are 4 calculations.

Use <, > or = to make each number sentence true.

- 57.25 × 12.5            750
- 1000.5 – 249.8            750
- 452.75 + 297.25            750
- 600 ÷ 0.8            750

[2]

17 Draw a ring around each prime number.

7      9      10      11      15      17

[1]

18 Here are 6 digit cards.



Use 4 of the cards to complete this number sentence.

$$\frac{\square}{\square} = \frac{\square}{\square}$$

[1]

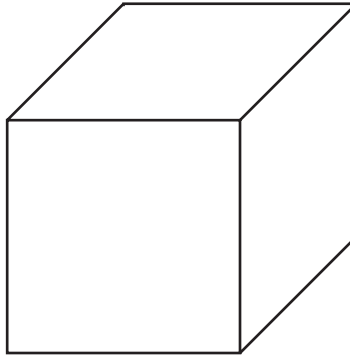
19 Apples cost \$1.60 for 500 g

What is the cost of 2 kg of apples?

\$ .....

[1]

20 Here is a diagram of a cube.



(a) How many edges does the cube have?

..... edges [1]

(b) How many vertices does the cube have?

..... vertices [1]

21 Here is a bus timetable.

Atown	07 45	11 05	14 45
Beville	08 05	11 25	15 05
Cecity	08 38	11 58	15 38
Doham	09 13	12 33	16 13

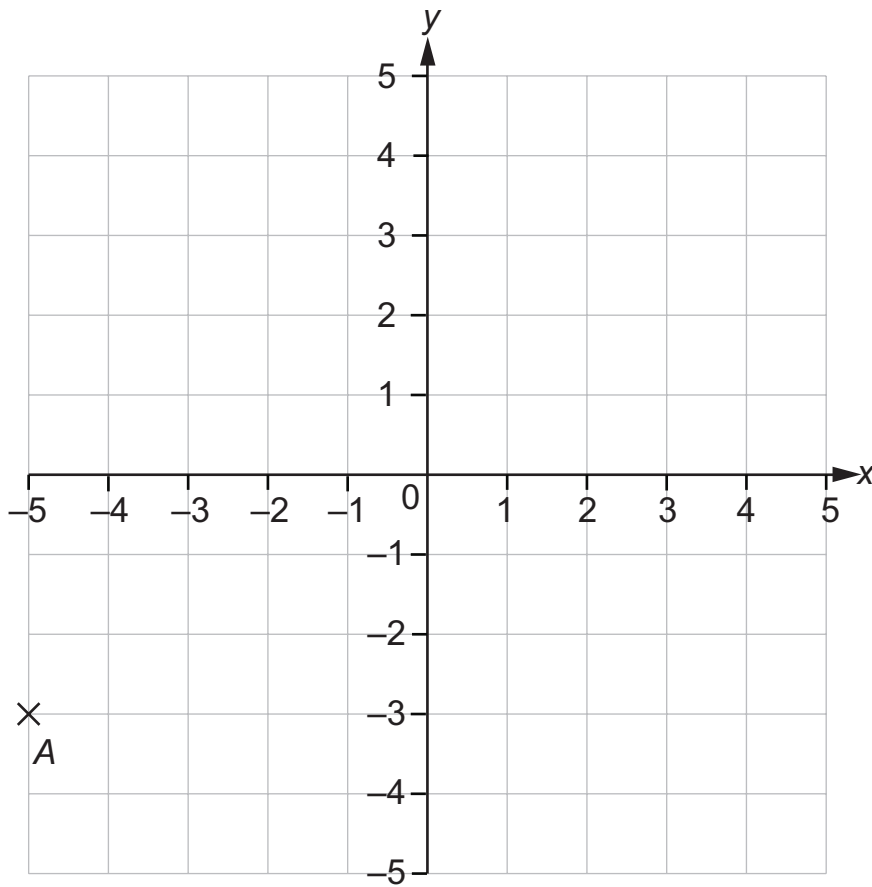
(a) How long does the bus take to get from Beville to Doham?

..... minutes [1]

(b) Tula gets on a bus at 14 45 and gets off 53 minutes later.  
Where does she get off the bus?

..... [1]

22 (a) Plot the points  $B(5, -3)$ ,  $C(3, 3)$  and  $D(-3, 3)$  on the grid.



[1]

(b) Join the points  $A, B, C, D$  to make a shape.  
What is the name of this quadrilateral?

..... [1]

23 Complete the calculations.

(a)  $5 + 2 \times 3 =$

[1]

(b)  $5 \times 6 + 4 \times 2 =$

[1]

24 Fill in the missing numbers to make this subtraction correct.

$$\begin{array}{r}
 \boxed{3} \ \boxed{\phantom{0}} \ \boxed{3} \ \boxed{7} \\
 - \phantom{0} \ \boxed{8} \ \boxed{\phantom{0}} \ \boxed{4} \ \boxed{\phantom{0}} \\
 \hline
 \boxed{\phantom{0}} \ \boxed{6} \ \boxed{9} \ \boxed{\phantom{0}} \ \boxed{2}
 \end{array}$$

[2]

25 Fatima has some pens.

She gives  $\frac{3}{10}$  of her pens to her brother.

She gives her brother 12 pens.

How many pens is she left with?

.....pens [2]

26 The table shows the test scores for a group of 100 students.

Score	Number of students
0	0
1	4
2	0
3	12
4	12
5	16
6	20
7	12
8	8
9	10
10	6

(a) Which score is the mode?

..... [1]

(b) What percentage of the students scored less than 3 marks?

..... % [1]



**BLANK PAGE**

---

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

Cambridge International Examinations is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.