

CANDIDATE
NAME

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CENTRE
NUMBER

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CANDIDATE
NUMBER

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MATHEMATICS

0845/02

Paper 2

April 2017

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.

Calculator allowed.

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

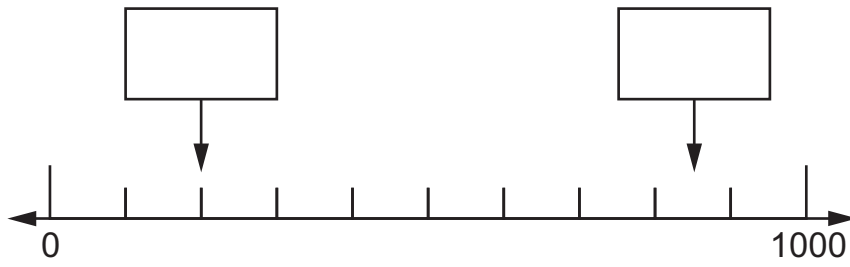
You should show all your working in the booklet.

The total number of marks for this paper is 40.

This document consists of **12** printed pages.

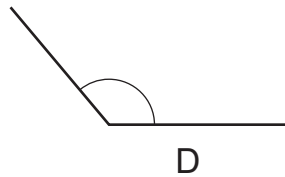
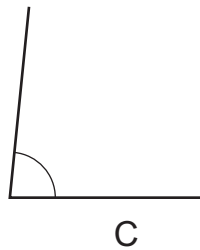
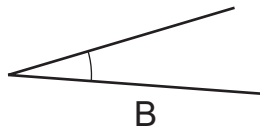
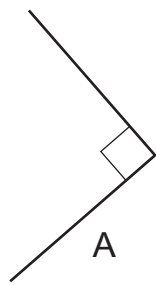


1 Write the missing number in each box.



[2]

2 Here are some angles.



Write the angles in order from smallest to largest.

.....
smallest largest

[1]

3 Write the missing number in the box.

$\div 4 = 96$

[1]













4 Complete the table of equivalent fractions and decimals.

Fraction	Decimal
$\frac{1}{2}$	0.5
	0.75
$\frac{63}{100}$	

[1]

5 Class 4A and Class 4B did a bug survey.

Here are their results.

Class 4A		Class 4B	
 represents 5 bugs		 represents 10 bugs	
Ant		Ant	
Caterpillar		Caterpillar	
Fly		Fly	
Snail		Snail	
Spider		Spider	

(a) How many ants did Class 4B find?

..... ants [1]

(b) Oliver says, "Class 4A found more spiders than Class 4B."

Explain why he is wrong.

.....
 [1]

6 Carlos takes a photograph of a toy.

In the photograph, the length of the toy is $\frac{1}{6}$ the length of the real toy.

(a) The real toy is 12 cm tall.

How tall is the toy in the photograph?

..... cm [1]

(b) The toy is 6 cm long in the photograph.

How long is the real toy?

..... cm [1]

7 2005 people visit a museum in August.

1997 people visit the same museum in September.

How many more people visit in August than in September?

..... people [1]

8 Find these numbers.

6709 rounded to the nearest 10 is

6709 rounded to the nearest 100 is

6709 rounded to the nearest 1000 is

[2]

9 Use the digits 1, 3, 5 and 9 to complete the calculation.

Each digit can only be used once.

$$\begin{array}{|c|c|} \hline & \\ \hline \end{array} \times \begin{array}{|c|c|} \hline & \\ \hline \end{array} = 1395$$

[1]

10 Which of these times is closest to 4 o'clock in the afternoon?

Draw a ring around your answer.

4:35 pm

14:05

04:17

16:25

[1]

11 Here are six numbers.

35 055

35 050

35 500

35 550

35 005

35 505

Choose one of these numbers to complete this inequality.

$$\begin{array}{|c|} \hline \\ \hline \end{array} > \begin{array}{|c|} \hline 35\,505 \\ \hline \end{array}$$

Choose another one of these numbers to complete this inequality.

$$\begin{array}{|c|} \hline \\ \hline \end{array} < \begin{array}{|c|} \hline 35\,050 \\ \hline \end{array}$$

[1]

12 Aiko says that the number 342 is divisible by 5

Explain why she is wrong.

.....
 [1]

13 Two children take part in a sponsored read.

Here are their start and finish times.

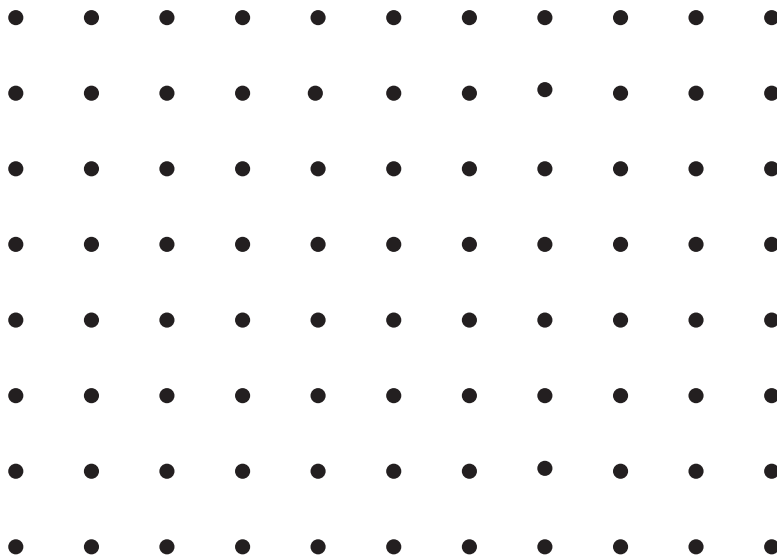
	Start	Finish
Pierre	09:15	10:58
Chen	09:35	11:28

How much longer did Chen read for than Pierre?

..... minutes [1]

14 Here is a 1 cm grid.

Join dots to make a rectangle with an area of 18 cm^2 .



[1]

15 Draw a ring around the number that is a common multiple of 6 **and** 8

14

24

34

42

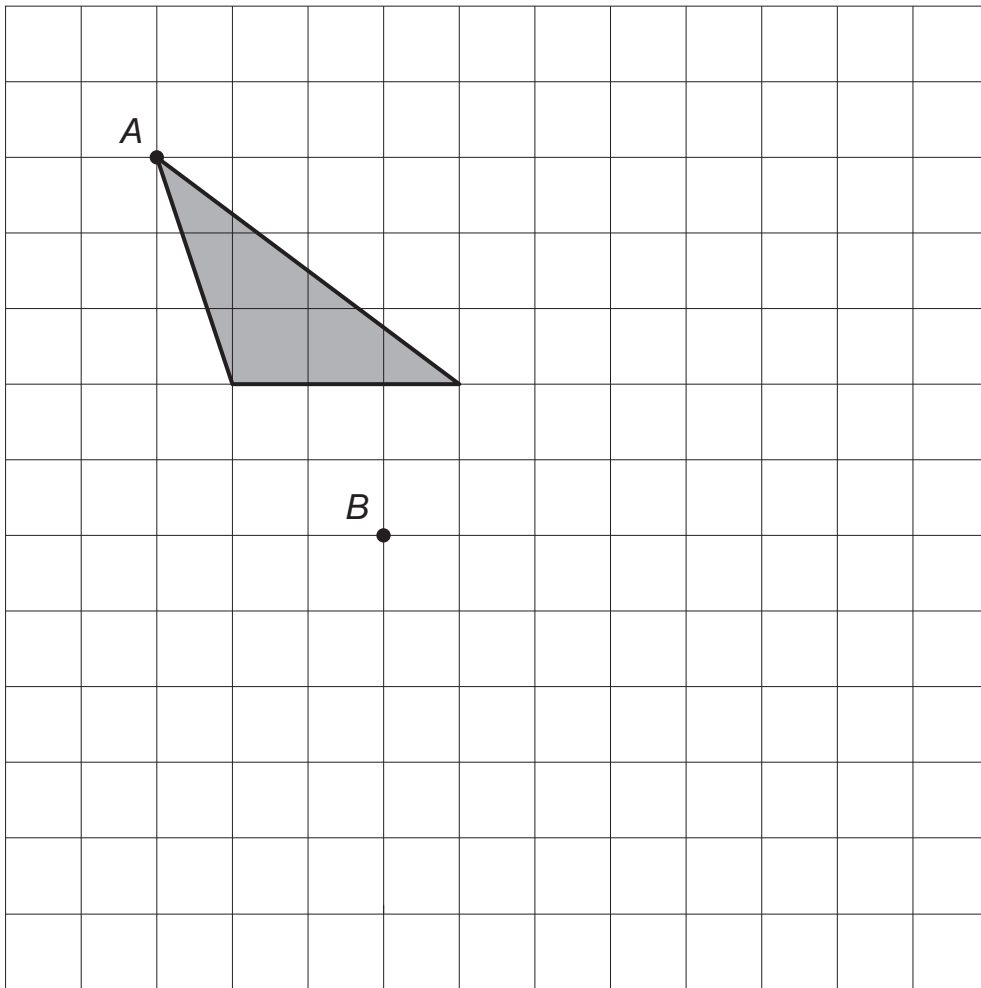
54

[1]

16 Here is a triangle on a square grid.

The triangle is translated so that point *A* moves to point *B*.

Draw the triangle in its new position.



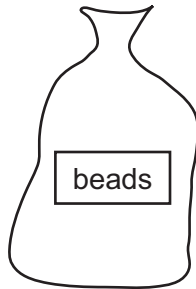
[1]

17 Write **all** the prime numbers between 10 and 20

..... [2]

18 A bag contains 10 red beads and 10 blue beads.

Ahmed removes 9 red beads from the bag.



Ahmed takes **another** bead from the bag.

What is the likelihood of him taking another red bead?

Draw a ring around the correct answer.

impossible unlikely even chance likely certain

[1]

19 Class 6 visit a museum.

There are 22 children in class 6

4 adults go with them.

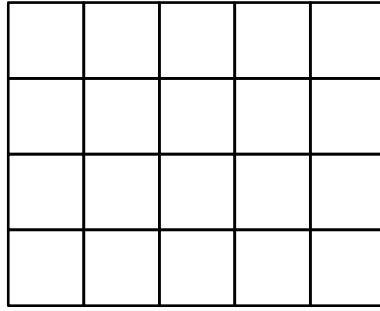
Entrance to the museum costs \$2.75 for children and \$4.60 for adults.

What is the total cost of the visit?

Show your working.

\$ [2]

20 Here is a rectangle.



(a) Shade 10% of the rectangle.

[1]

(b) In a different rectangle Blessy shades 30%.

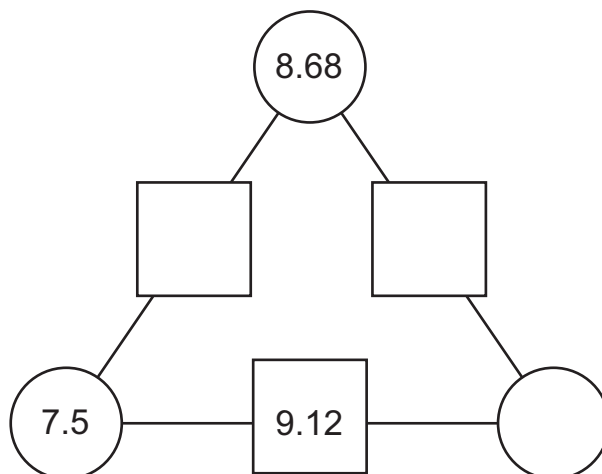
What **fraction** of Blessy's rectangle is not shaded?

..... [1]

21 In the diagram the sum of the numbers in the circles is written in the square.



Use the same rule to complete this diagram.



[2]

22 Here are some statements.

Write **true** if the statement is correct.

Write **false** if it is not correct.

4 thousands > 41 hundreds	<input type="text"/>
30 hundreds < 310 tens	<input type="text"/>
20 tens = 2 thousands	<input type="text"/>

[1]

23 Write the **same** number in each box.

$$\boxed{} + \boxed{} \times \boxed{} = 30$$

[1]

24 Here is a parallelogram.



(a) What is the length of the shortest side to the nearest centimetre?

..... cm [1]

(b) What is the length of the longest side to the nearest millimetre?

..... mm [1]

25 Complete the following sentences.

A tetrahedron has faces.

A cuboid has vertices.

A square-based pyramid has edges.

[2]

26 This clock is at a Sydney train station in Australia.



It is 7 hours earlier in Helsinki.

Write the time shown on a clock in Helsinki.



[1]

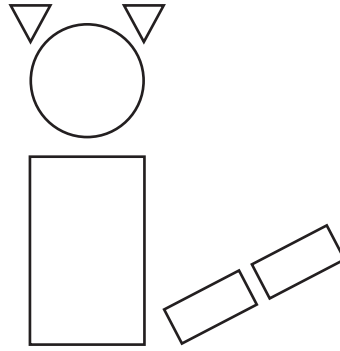
27 Write the missing numbers.

$$36 \div 5 = 7 \frac{1}{\square}$$

$$74 \div 10 = 7 \frac{\square}{5}$$

[1]

28 Hassan makes a picture of a cat using 6 tiles.



He makes more of these cats.

He uses 36 triangular tiles.

How many of these cats does he make?

..... cats [1]

29 A one cent coin has a mass of 3.5 grams.

A bag of one cent coins has a mass of 2.17 kg.

How much money is in the bag?

Show your working.

\$ [2]

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