

Ma

KEY STAGE

2

LEVELS

3-5

Mathematics test

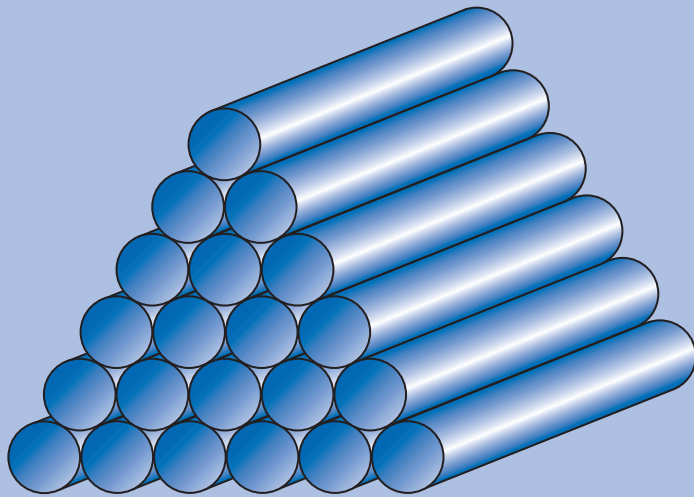
Test B

Calculator allowed

First name _____

Last name _____

School _____



2008

For marker's use only

Page	Marks
5	
7	
9	
11	
13	
15	
17	
19	
21	
23	
TOTAL	



Emily



Nisha



Ben

Instructions

You **may** use a calculator to answer any questions in this test.

Work as quickly and as carefully as you can.

You have **45 minutes** for this test.

If you cannot do one of the questions, **go on to the next one**.

You can come back to it later, if you have time.

If you finish before the end, **go back and check your work**.

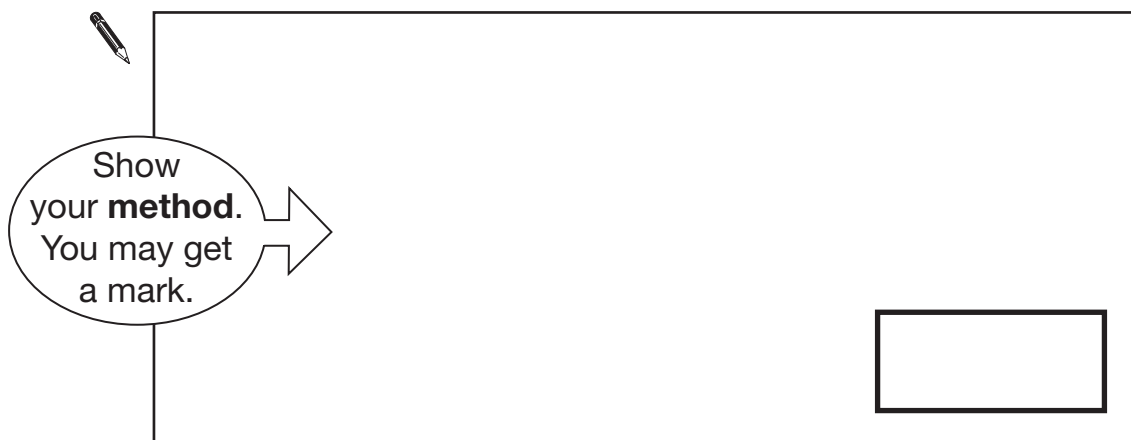
Follow the instructions for each question carefully.



This shows where you need to put the answer.

If you need to do working out, you can use any space on a page.

Some questions have an answer box like this:



For these questions you may get a mark for showing your method.

1

Join each number to the set of numbers that it belongs to.

One has been done for you.

A matching exercise with numbers on the left and ranges on the right. A line connects 357 to '301 to 400'.

357	1 to 100
199	101 to 200
73	201 to 300
1000	301 to 400
224	401 to 500
	greater than 500

1 i

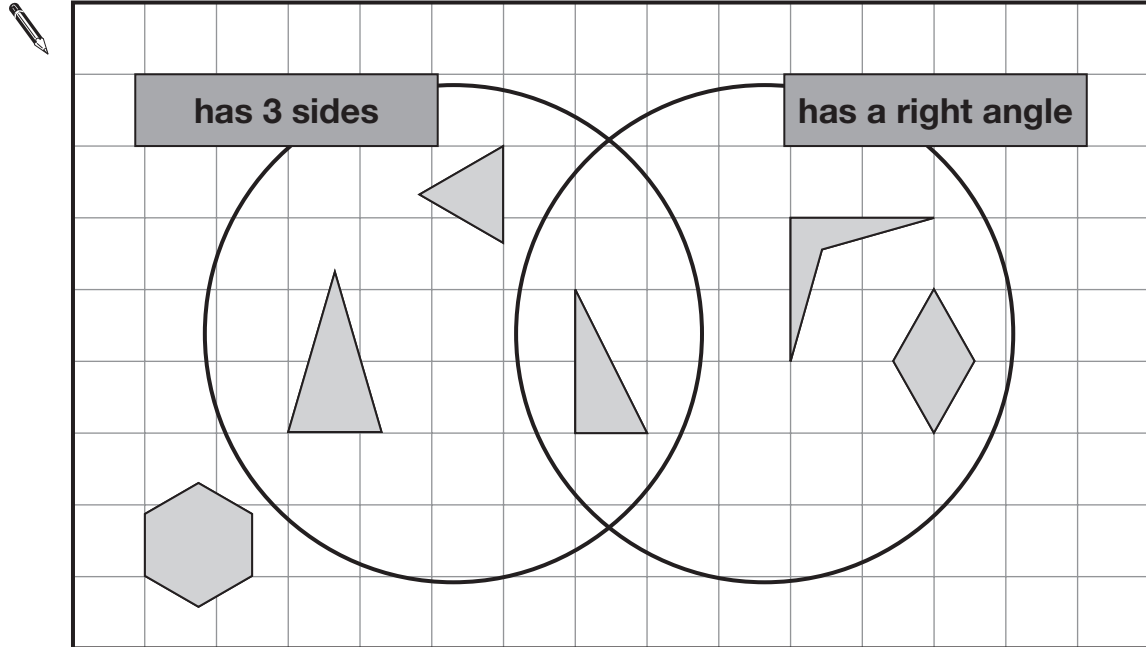
1 ii

2 marks

2

Here is a diagram for sorting shapes.

One of the shapes is in the wrong place.
Put a cross (x) on it.



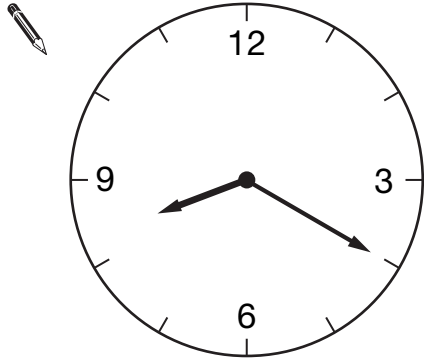
2

1 mark

3

Here are two clock faces.

Join each clock face to the correct digital time.



9:20

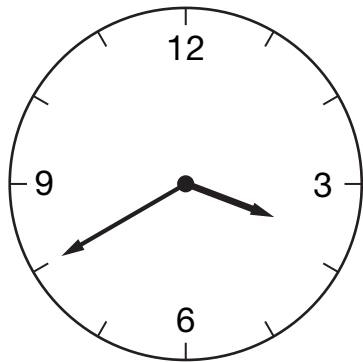
3:40

4:40

8:40

8:20

4:20



3a

1 mark

3b

1 mark

4



bottle of milk
39p



cake
29p

Ben buys **three** bottles of milk and **six** cakes.

How much does he spend altogether?



Show
your **method**.
You may get
a mark.

£

4i

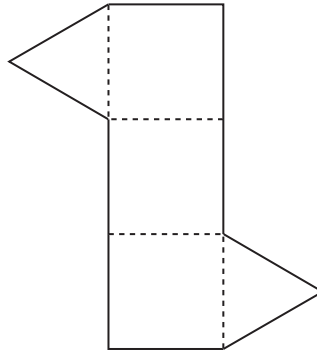
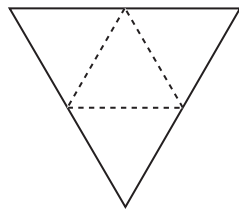
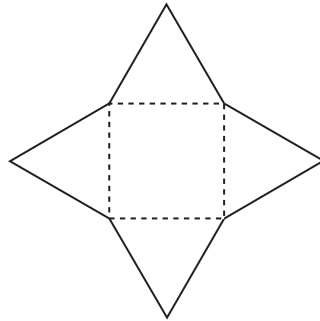
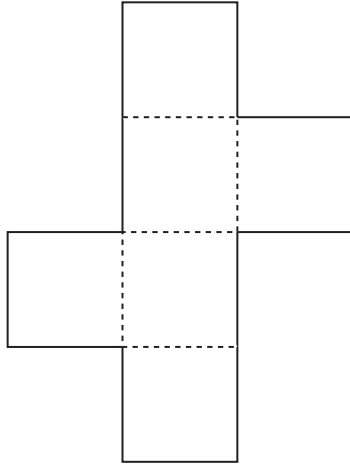
4ii

2 marks

5

Here are some nets of shapes.

For each net, put a tick (✓) if it folds to make a **pyramid**.
Put a cross (✗) if it does not.

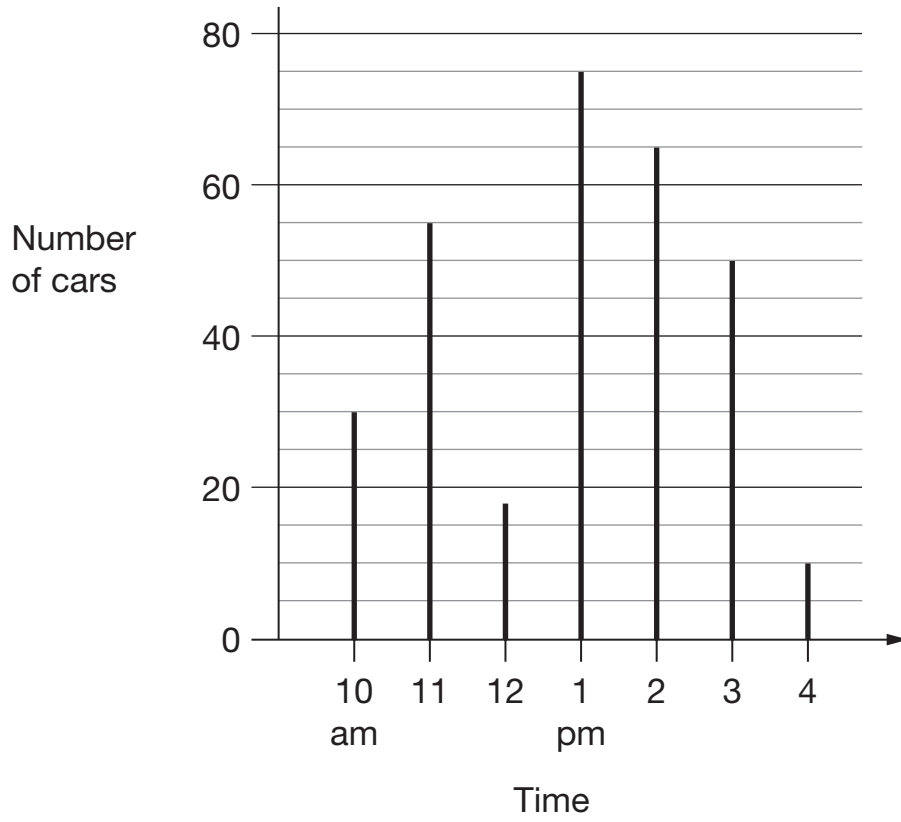


5

1 mark

6

This chart shows the number of cars in a car park at different times on one day.



There are 80 cars in the car park when it is full.

How many **empty spaces** were there in the car park at 3pm?



6a

1 mark

Circle **all** the times when the car park was less than half full.



10
am

11
am

12
noon

1
pm

2
pm

3
pm

4
pm

6b

1 mark

7

Emily has these coins.



How much more money does Emily need to make exactly £5?



£

7a

1 mark

Nisha has **thirty** 5p coins and **twenty** 10p coins.

How much money does she have altogether?



£

7b

1 mark

8

Nisha says,

*'When you halve any even number,
the answer is always an odd number'.*



Is she correct?
Circle **Yes** or **No**.



Yes / No

Explain how you know.

A large, empty, cloud-shaped area with a scalloped border, intended for the student to write their explanation.

8

1 mark

9

Here are four labels.

even	multiples of 9	not even	not multiples of 9
------	----------------	----------	-----------------------

Write each label in the correct position on the sorting diagram below.



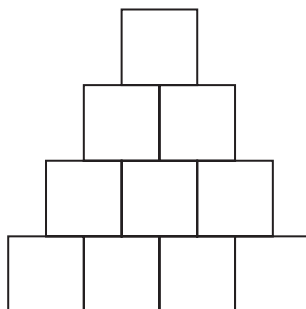
	72 54	56 84
	63 45	49 75

9

1 mark

10

Shade $\frac{1}{5}$ of this shape.

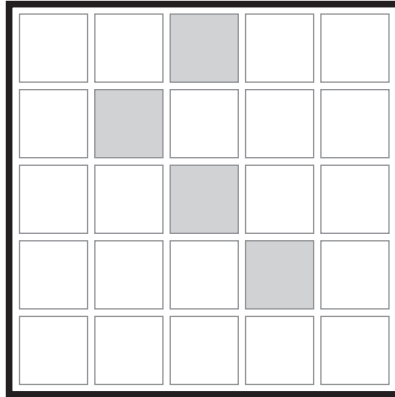


10

1 mark

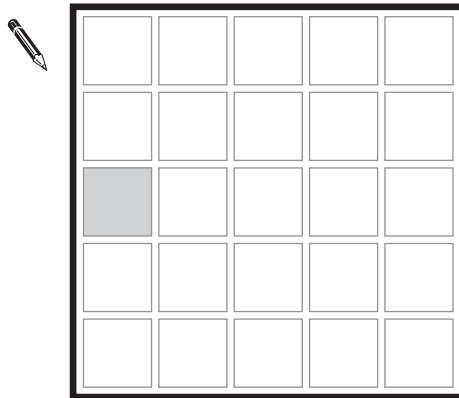
11

Ben makes this design on a grid.



He rotates the grid to a new position.

Shade in the missing parts of the design.

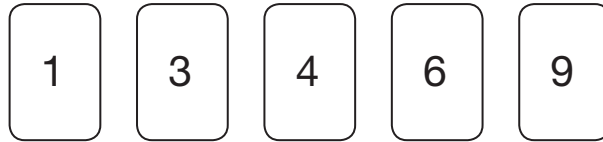


11

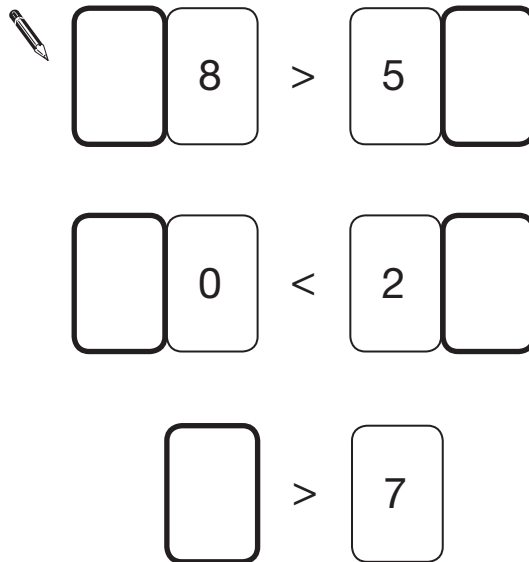
1 mark

12

Here are five digit cards.



Use each card **once** to complete the statements below.



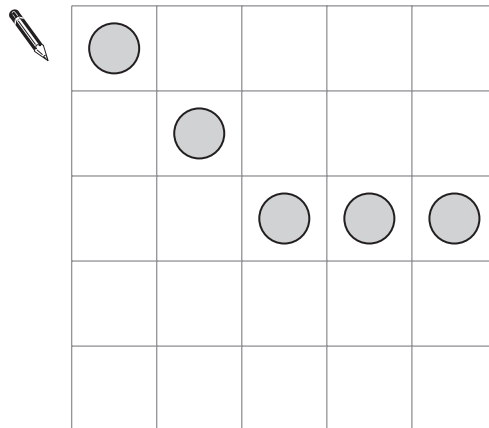
12i

12ii

2 marks

13

Draw **two** more circles on this grid to make a design that has a line of symmetry.



13

1 mark

14

Emily chooses two numbers.



She adds the two numbers together and divides the result by 2

Her answer is 44

One of Emily's numbers is 12

What is Emily's other number?



Show
your **method**.
You may get
a mark.

14i

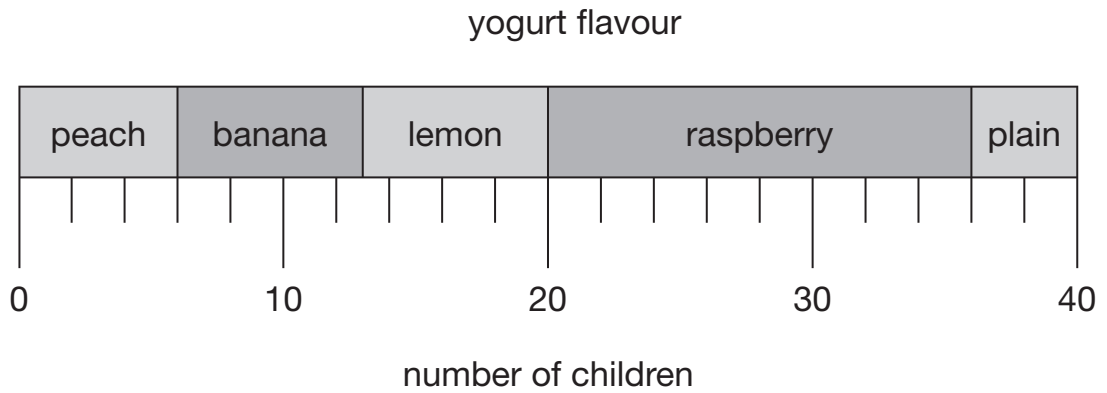
14ii

2 marks

15

40 children each chose their favourite flavour of yogurt.

This chart shows the results.



How many children chose **lemon** yogurt?



15a

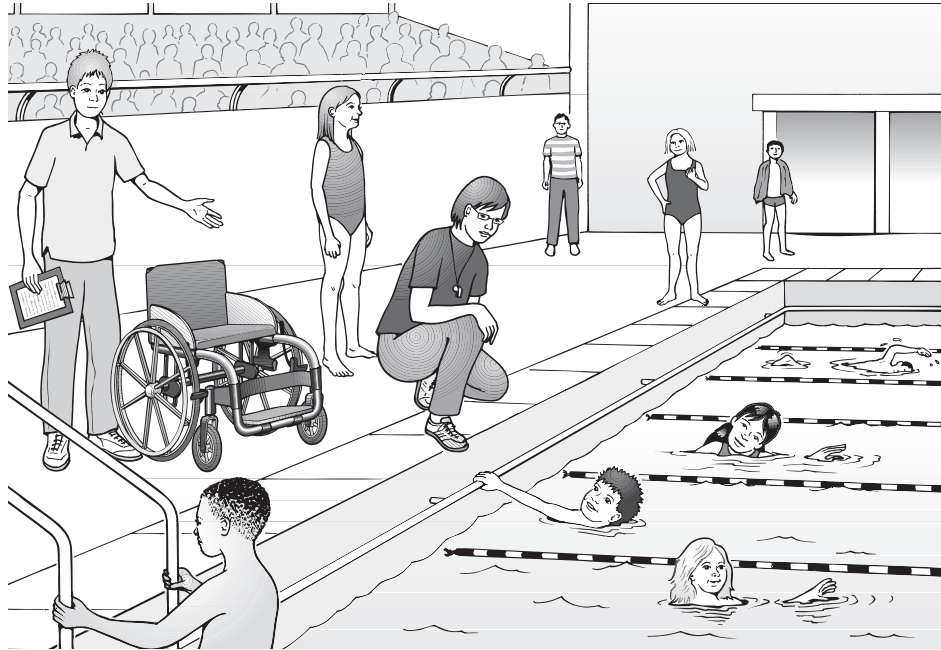
1 mark

How many more children chose **raspberry** than **plain** yogurt?



15b

1 mark



Emily, Ben and Nisha take part in a sponsored swim to collect money for charity.

Emily collects £2.75 **more** than Nisha.

Ben collects £15

Nisha collects £7 **less** than Ben.

Altogether how much money do the three children collect?

Show
your **method**.
You may get
a mark.

£

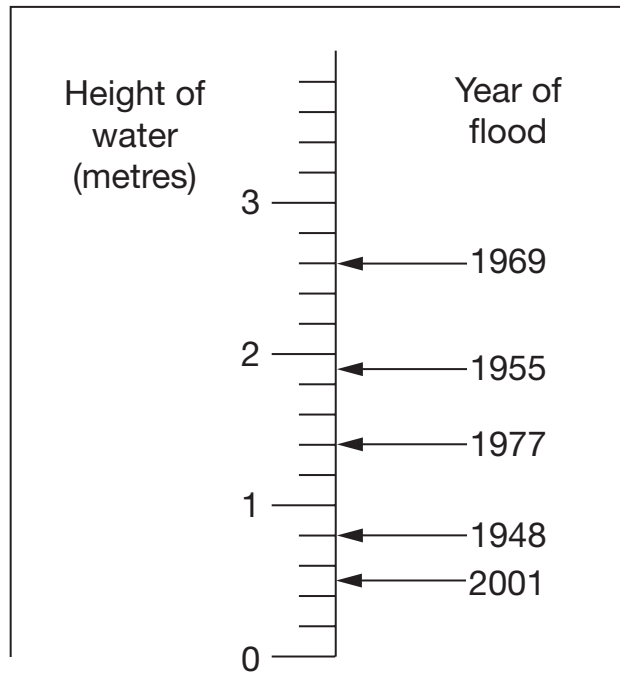
16i

16ii

2 marks

17

This scale shows the dates of floods and the height of the water in the floods.



How high was the water in the 1955 flood?



17a

1 mark

How much higher was the water in the 1969 flood than in the 1948 flood?



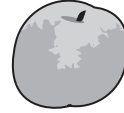
17b

1 mark

Small peaches
15p each



Large peaches
25p each



Emily has £5 to spend on peaches.

She decides to buy only small peaches or only large peaches.

How many **more** small peaches than large peaches can she buy for £5?



Show
your **method**.
You may get
a mark.

18i

18ii

2 marks

How much less than 1000 is $9.7 \times 9.8 \times 9.9$?



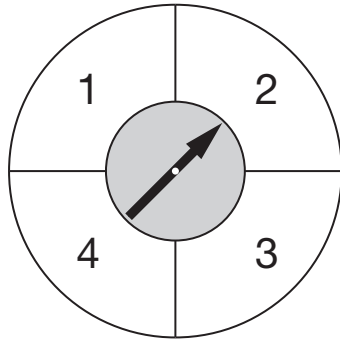
19

1 mark

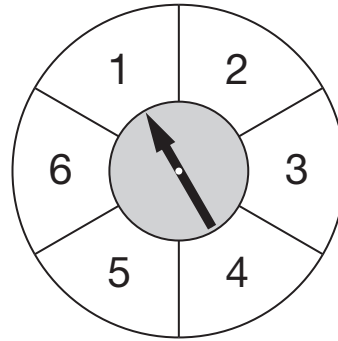
Here are two spinners, P and Q.

Spinner P has 4 equal sections.

Spinner Q has 6 equal sections.



P



Q

Ben spins the pointer on each spinner.

For each statement below, put a tick (✓) if it is correct.
Put a cross (✗) if it is not correct.



Ben is **more likely** to score 4
on spinner P than on spinner Q.

The score on spinner P is **certain** to be less
than the score on spinner Q.

Ben is **equally likely** to score an even number
on spinner P and spinner Q.

A score of less than 3 is **equally likely**
on spinner P and spinner Q.

20i

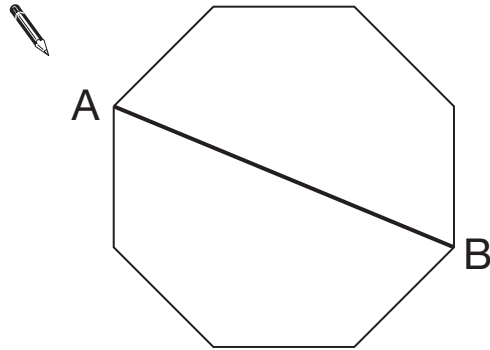
20ii

2 marks

21

Here is a regular octagon with two vertices joined to make the line AB.

Join two other vertices to draw **one** line that is **parallel** to the line AB.

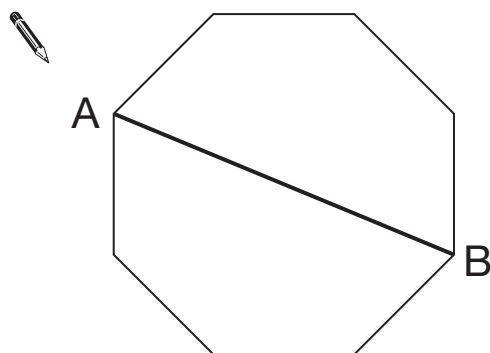


21a

1 mark

Here is the octagon again.

Join two vertices to draw **one** line that is **perpendicular** to the line AB.



21b

1 mark

22

Find the multiple of 45 that is closest to 8000



Show your **method**.
You may get a mark.



22i

22ii

2 marks

23

m stands for a whole number greater than 10 and less than 20

n stands for a whole number greater than 2 and less than 10

What is the **smallest** number that $m \times n$ could be?



23a

1 mark

What is the **largest** number that $m - n$ could be?



23b

1 mark

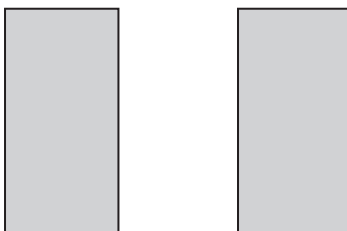
24

The perimeter of a square is 72 centimetres.



Not actual size

The square is cut in half to make two identical rectangles.



What is the perimeter of **one** rectangle?



Show your **method**.
You may get a mark.

A large empty rectangular box with a black border, intended for the student to show their work. In the bottom right corner of this box, there is a smaller rectangle with a black border containing the text "cm".

24i

24ii

2 marks

