Cambridge Primary Progression Test

Mathematics paper 2

Stage 6

45 minutes

Name ………………………………………………………………………

Additional materials: Ruler
Calculator

READ THESE INSTRUCTIONS FIRST

Answer **all** questions in the spaces provided on the question paper.

Calculator allowed.

You should show all your working on the question paper.

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

The total number of marks for this paper is 40.

For Teacher's Use	
Page	Mark
1	
2	
3	
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9	
10	
11	
12	
13	
14	
15	
16	
Total	

1 This sequence increases by 6 each time.

$$6 \qquad 12 \qquad 18 \qquad 24 \qquad \ldots \qquad \ldots$$

This sequence increases by 5 each time.

$$5 \qquad 10 \qquad 15 \qquad 20 \qquad \ldots \qquad \ldots$$

Find a number greater than 50 that will be in **both** sequences.

.... [1]

2 Safia's ruler shows measurements in both inches and centimetres.
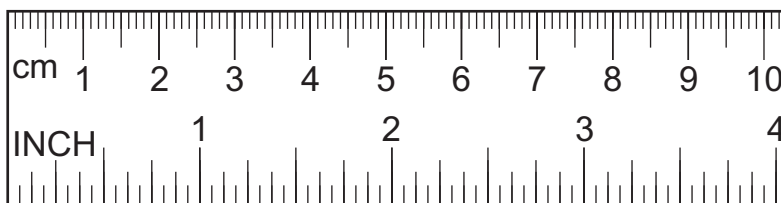
Her book measures 12 inches.

Write 12 inches to the nearest centimetre.

.... cm [1]

3 The numbers in the cloud are all divisible by the same three numbers.

175   325

4000

225

2950   1075

550
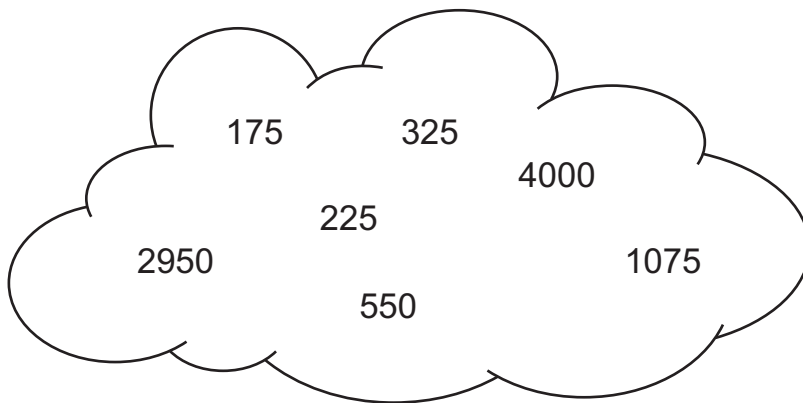
Complete the sentence.

All the numbers are divisible by 1, 5 and ....

[1]

4 Draw lines to join each percentage to its equivalent fraction.

20% $\frac{1}{4}$

25% $\frac{1}{5}$

30% $\frac{35}{100}$

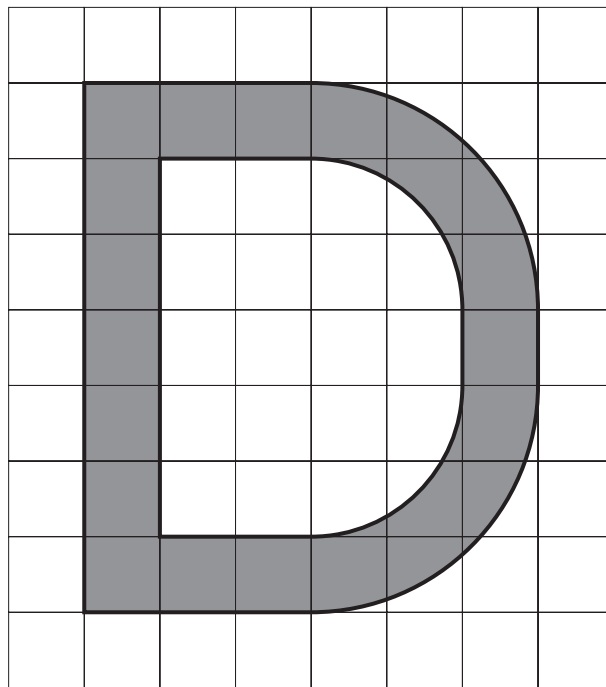35% $\frac{3}{10}$

[1]

5 Complete the calculations.

43 268 = 40 000 + ☐ + 268

43 268 = 40 000 + ☐ + 168

43 268 = 30 000 + ☐ + 168

[2]

6 The letter D is drawn on a centimetre square grid.

Draw a ring around the best estimate of the area of the letter D.

15 cm^2 20 cm^2 25 cm^2 30 cm^2 35 cm^2

[1]

7 **(a)** Complete the table to show whether each fraction is less than or greater than 0.6
The first one has been done for you.

	Less than 0.6	Greater than 0.6
$\dfrac{1}{6}$	✓	
$\dfrac{4}{7}$		
$\dfrac{8}{13}$		

[1]

(b) Convert $\dfrac{43}{8}$ to a decimal.
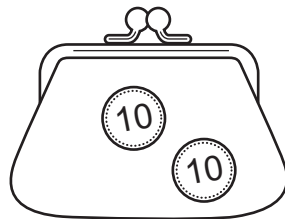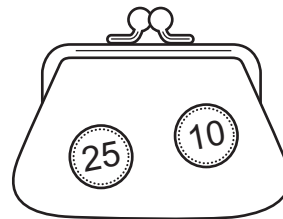
.... [1]

8 Oliver has a purse containing 2 coins.
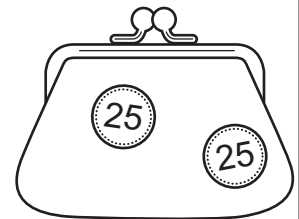He selects one coin at random from his purse.

He is **certain** to have 25 cents or more.
It is **impossible** he will have a 50 cent coin.
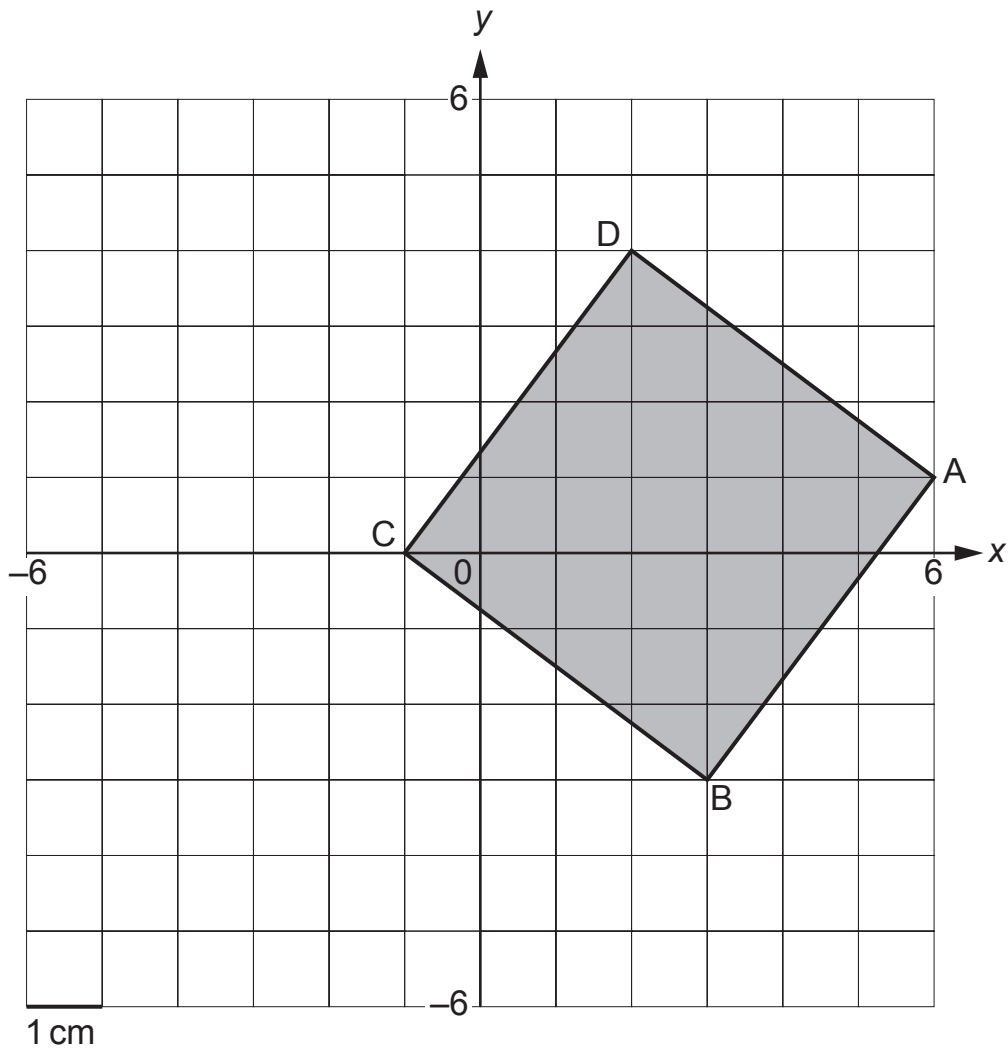
Tick (✓) Oliver's purse.
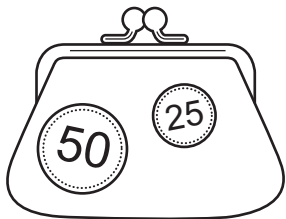
[1]

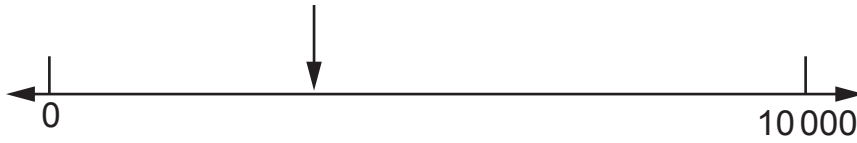**9** A square is drawn on a co-ordinate grid marked in centimetres.

1 cm

(a) Write down the co-ordinates of point B.

(........... , ...) [1]

(b) What is the perimeter of the square?

.... cm [1]

10 Estimate the position of the arrow (↓) on the number line.

.... [1]

11 △ and ☐ each represent a **two-digit multiple of ten**.

△ × ☐ = 2400

Complete the table to show the different possible pairs of values for △ and ☐.

The first two pairs have been done for you.

	△	☐
Pair 1	60	40
Pair 2	40	60
Pair 3		
Pair 4		

[1]

12 Here are four digit cards.

| 3 | 4 | 5 | 6 |

Use each card **once** to complete the calculation.

☐.☐ − 2.9 = ☐.☐

[1]

13 Draw a line **exactly** 68 mm long.
It must pass through two circles (●).
It must **not** pass through the boxes (▨).
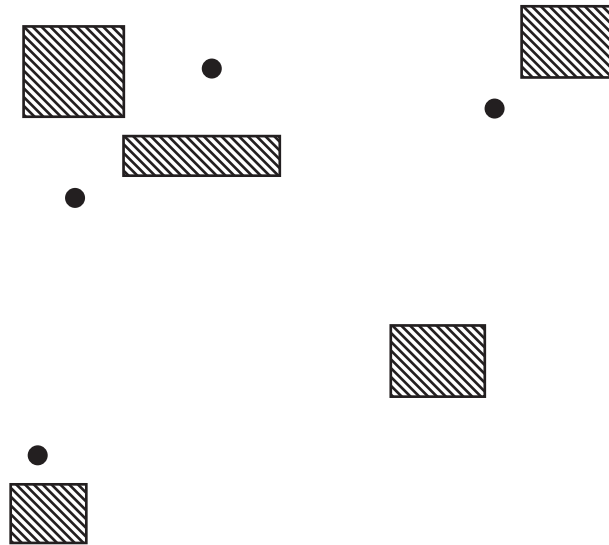
[1]

14 Here is part of a hundred square.

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					

What is the special name given to the shaded numbers?

.... [1]

15 Complete the calculation.

68 ÷ ☐ = ☐ remainder 5

[1]

16 A ring has been placed around one pair of equivalent fractions.

Draw rings around **three more pairs** of equivalent fractions.

$$\frac{9}{12} \qquad \boxed{\frac{6}{12} \qquad \frac{1}{2}}$$

$$\frac{3}{4} \qquad \frac{8}{20} \qquad \frac{1}{3}$$

$$\frac{2}{5} \qquad \frac{3}{10} \qquad \frac{12}{40}$$

[2]

17 What number is the arrow pointing to?
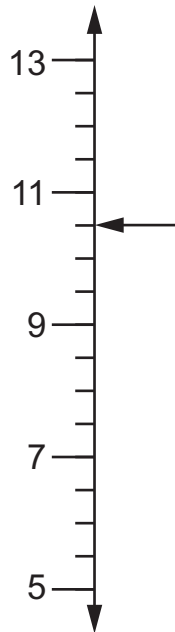
.... [1]

18 The number line shows the surface temperatures of four planets.
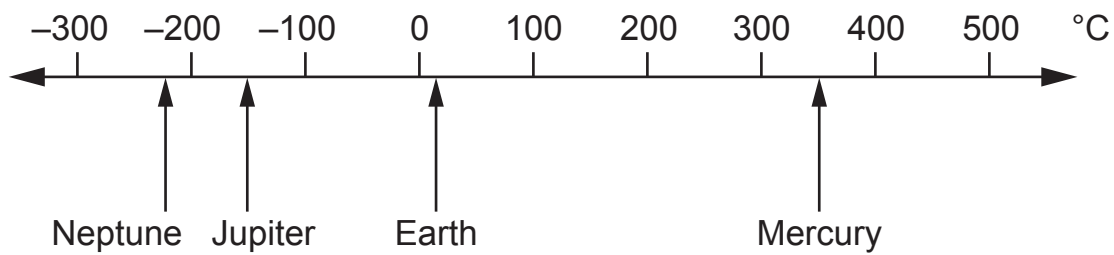
(a) What is the surface temperature of Jupiter?

.... °C [1]

(b) Which two planets have a difference in surface temperature of about 500 °C?

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

19 Use <, > or = to complete these statements.

42.6 × 7 ☐ 1493 ÷ 5

39.4 + 27 + 9.25 ☐ 105.05 − 29.4

[1]

20 The table shows the scores for 30 children in a test.

2	3	3	7	8	9	10	10	11	12
12	12	12	14	14	15	16	16	16	16
16	17	18	18	19	19	19	20	20	20

(a) What is the range of these scores?

.... [1]

(b) What is the mode of these scores?

.... [1]

21 Here are 4 different quadrilaterals.
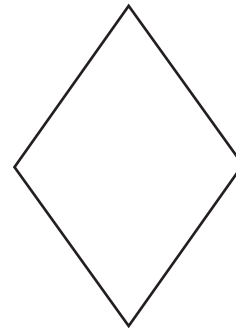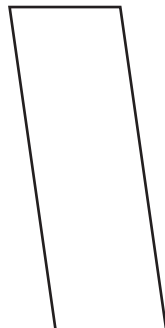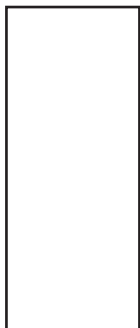
(a) One of these quadrilaterals has only one pair of parallel sides.
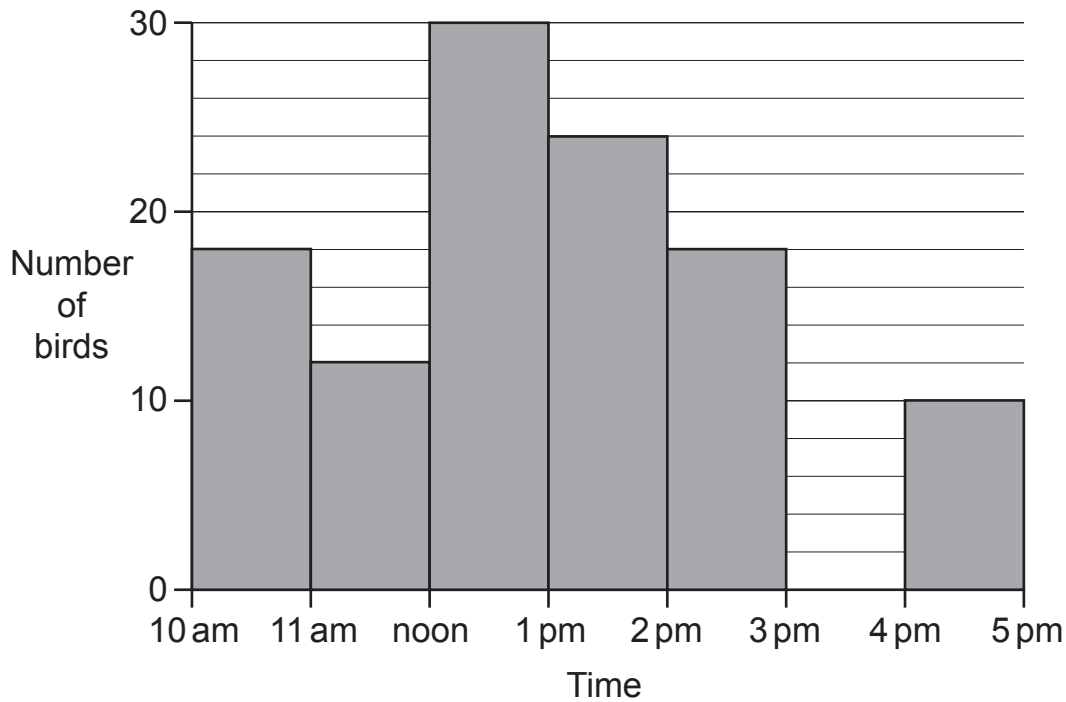
Write the name of this quadrilateral.

.... [1]

(b) One of these quadrilaterals has 4 equal sides.

Write the name of this quadrilateral.

.... [1]

22 Anastasia counted the number of birds visiting her garden each hour between 10 am and 5 pm.
The chart shows her data.
The bar for 3 pm to 4 pm is missing.

(a) After 3 pm she saw 28 birds.

Complete the chart. [1]

(b) Anastasia says,

> Between 1 pm and 2 pm twice as many birds visited the garden than between 11 am and noon.

Is Anastasia correct?   Yes ☐   No ☐

Explain your answer.

....

.... [1]
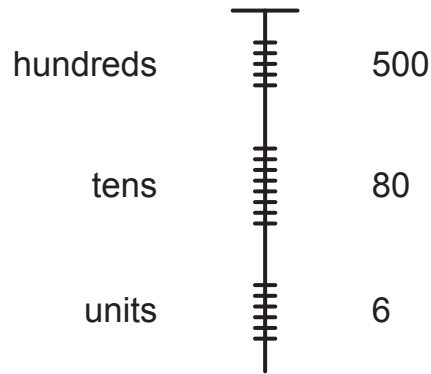
23 The Incas developed a number system using knots in strings.

The diagram shows how the number 586 is represented.

hundreds   500
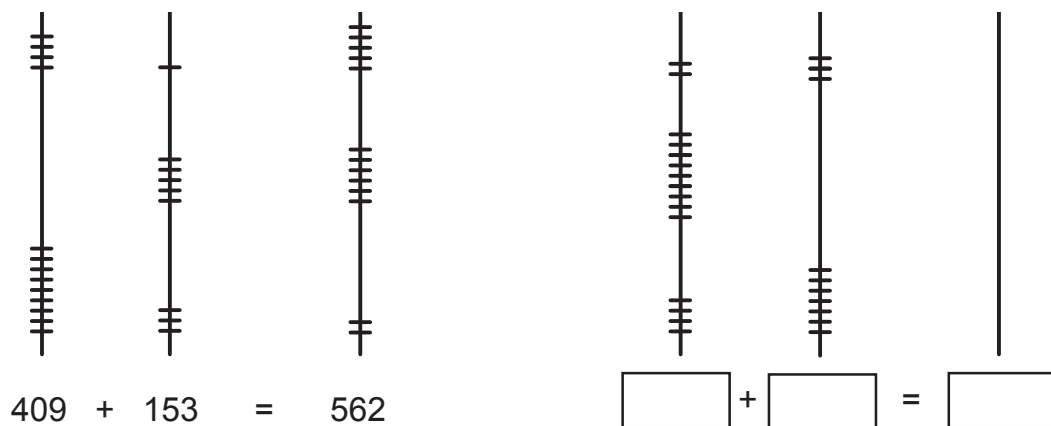
tens   80

units   6

(a) Draw a diagram to show the number 345

[1]

(b) The diagrams show Inca addition.

409   +   153   =   562   [   ] + [   ] = [   ]

Complete the addition on the second diagram.

[1]

24 Ahmed has a 2-metre roll of tape.
He cuts pieces of tape 35 cm long.
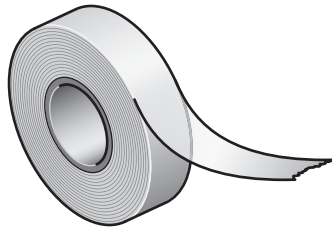
(a) How many complete pieces can he cut?

.... pieces [1]

(b) How much tape will be left over?

.... cm [1]

25 Manjit and Lily are talking about a number.

Manjit says,

Two of the factors must be
1 and the number itself.

Lily says,

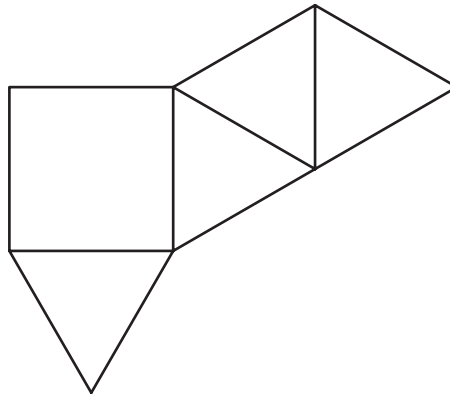The other factors are
3   5   15   25

What is their number?

.... [1]

26 Here is the net of a 3D shape.

What is the name of the 3D shape?

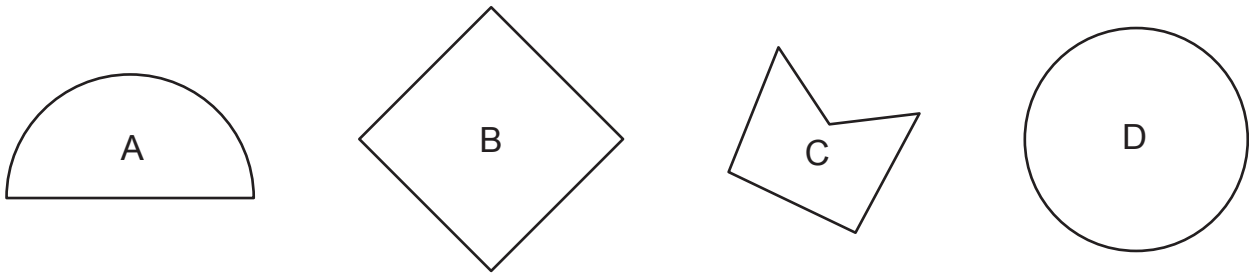................................. [1]

27 A running relay team has 4 runners.
Their best time this year for 400 m is 43.7 seconds.
The table shows the times for the first three runners.

Runner	Time (seconds)
1	9.87
2	12.05
3	11.3

What time must the fourth runner achieve to **equal** their best time this year?
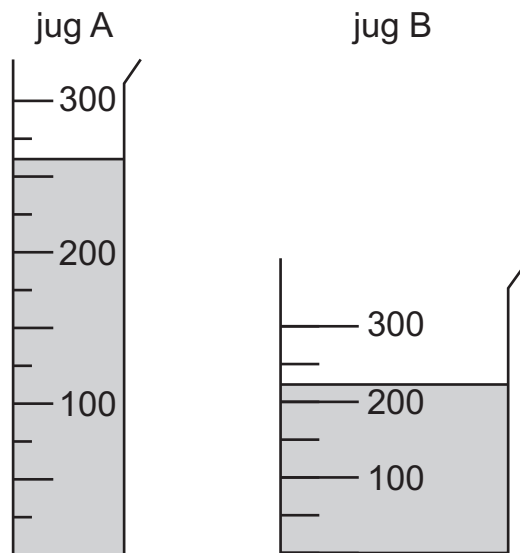Show your calculations.

.... seconds [2]

For
Teacher's
Use

28 A, B, C and D are drawings of 2D shapes.

Write the letters of the shapes that are polygons.

.... [1]

29 Here are two measuring jugs.
The scales are labelled in millilitres.

jug A   jug B

Chen says 'Jug B has more liquid in it than jug A.'

Is he correct?   Yes ☐   No ☐

Explain your answer.

....

.... [1]