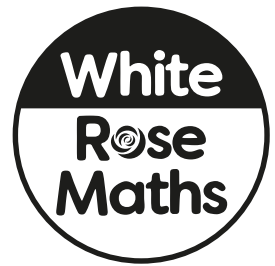


For: Pearson Edexcel GCSE (9–1)

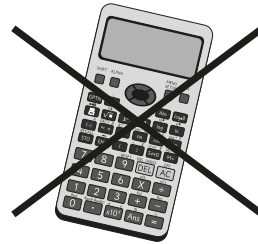


GCSE

Practice Paper 1MA1

Mathematics

Paper 2F (Non-Calculator) Foundation Tier



Surname

Other names

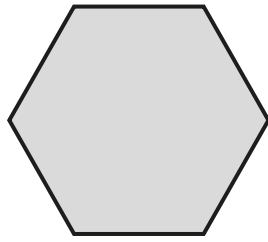
You should have:

- A pen, pencil, ruler and an eraser.
- Tracing paper may be used.
- A formula sheet.

Information

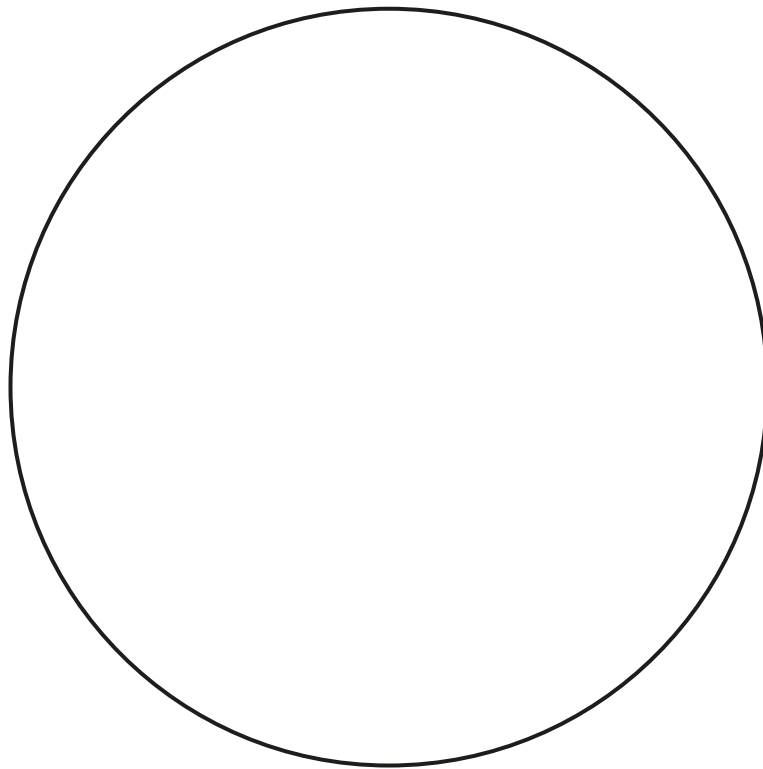
- The total mark for this paper is 80
- The marks for each question are shown in brackets.
- Answer all questions in the spaces provided – *there may be more space than you need.*
- You must show all your working.
- Diagrams are not accurately drawn, unless otherwise indicated.
- Calculators may not be used.
- Check your answers if you have time at the end.

1 Write down the mathematical name of the shape.



(1 mark)

2 Draw a chord on the circle.



(1 mark)

3 Circle all the multiples of 12 in the list.

3 24 6 1 60 240

(2 marks)

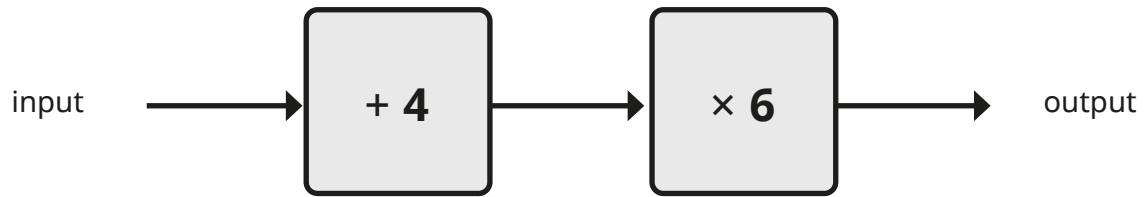
4 a) Round 3496 to the nearest hundred.

(1 mark)

b) Round 3.496 to the nearest integer.

(1 mark)

5 Here is a function machine.



a) Work out the output when the input is 7

_____ (1 mark)

b) Work out the output when the input is $\frac{2}{3}$

_____ (1 mark)

c) Work out the input when the output is -9

_____ (1 mark)

6 ABCD is a trapezium.



a) Draw arrows (>>) to show the parallel sides on ABCD.

(1 mark)

b) Which side is perpendicular to AB?

(1 mark)

7 Jack gets paid £6.20 per hour.

One day, he works from 8 am to 2 pm.

How much does Jack get paid for this day?

(2 marks)

8 Here are the ages of seven people.

45, 38, 43, 43, 39, 40, 39

Find the median age.

(1 mark)

9 Write 0.6 as a percentage.

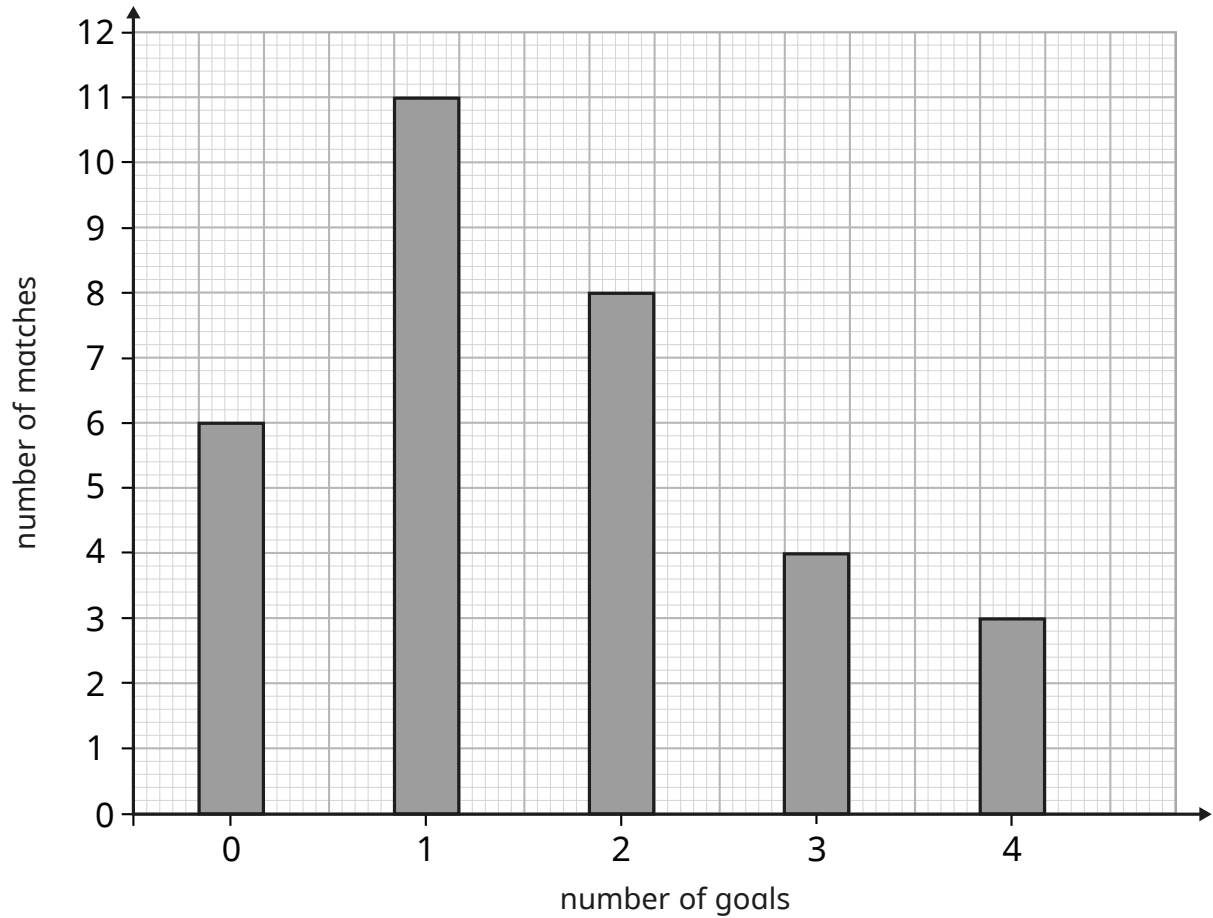
(1 mark)

10 Write the fractions in order.
Start with the smallest fraction.

$\frac{1}{2}$ $\frac{2}{3}$ $\frac{5}{7}$ $\frac{1}{8}$ $\frac{4}{9}$

(2 marks)

- 11** The bar chart shows the number of goals scored per game by a hockey team in a season.



- a)** How many times did the team score at least 2 goals in a game?

_____ (1 mark)

- b)** How many games did the team play in the season?

_____ (1 mark)

- c)** What is the modal number of goals scored by the team?

_____ (1 mark)

12 Students in years 7, 8 and 9 study French, German or Spanish.

	French	Spanish	German	Total
Year 7	59		58	180
Year 8	56	19		
Year 9	35	38		105
Total				400

a) Complete the two-way table.

(2 marks)

b) Work out the total number of students in years 7, 8 and 9 who study Spanish.

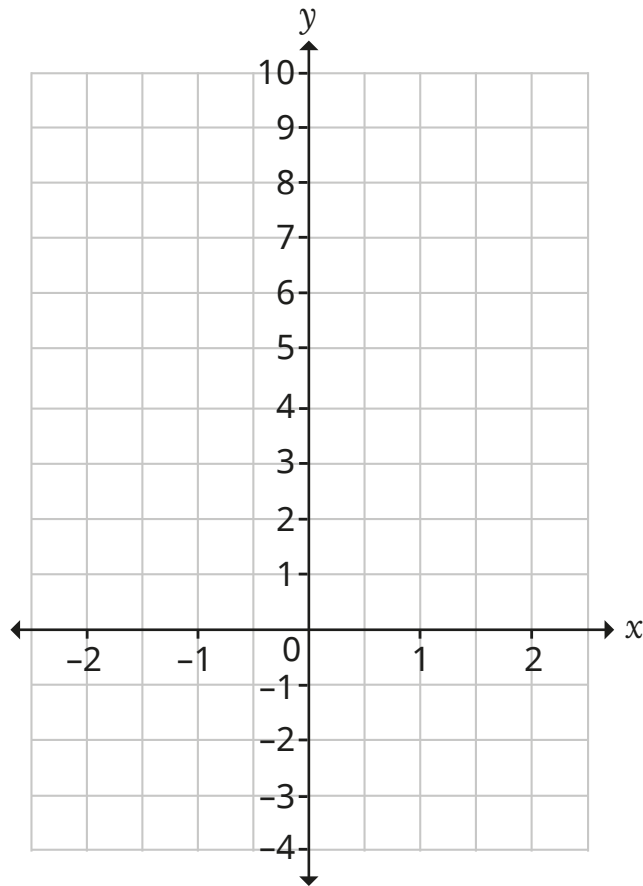
(1 mark)

13 a) Complete the table of values for $y = 3x + 2$

x	-2	-1	0	1	2
y					

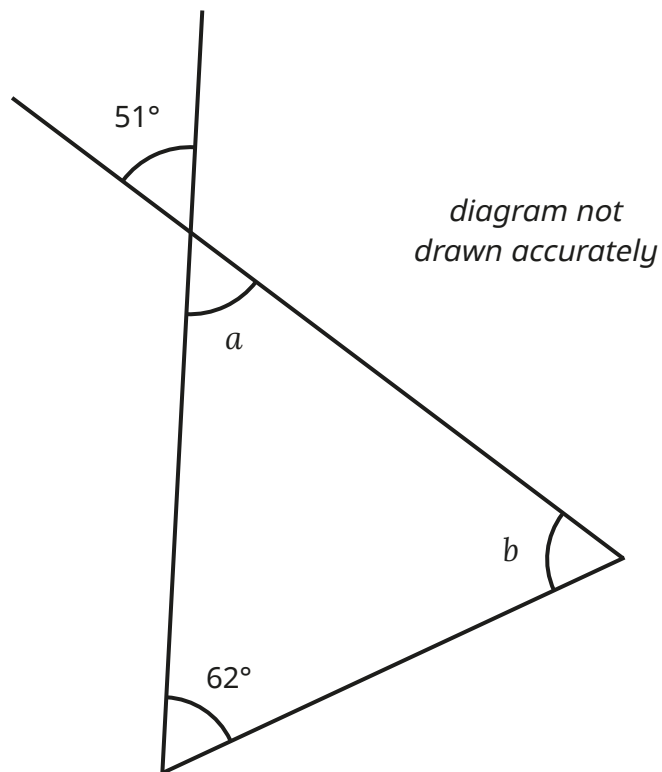
(2 marks)

b) On the grid, draw the graph of $y = 3x + 2$ for values of x from -2 to 2



(2 marks)

14



a) Write down the size of angle a .

_____ (1 mark)

b) Work out the size of angle b .

_____ (2 marks)

- 15** A map is drawn using the scale of 1 cm to 8 miles.
The distance between two towns on the map is 7.5 cm.
Work out the actual distance between the two towns.

(2 marks)

- 16** Here is a recipe for cupcakes.

Cupcakes (makes 8)

100 g butter
100 g sugar
2 eggs
1 tsp vanilla extract
120 g flour
4 tbsp milk

- a)** Write the ratio of butter to flour in its simplest form.

(2 marks)

Dora wants to make 12 cupcakes.

- b)** Work out how much butter she needs.

(2 marks)

17 A dog is classed as a large breed dog if its mass is over 25 kg.

The mass of Ron's dog is 3 stone 10 lbs.

Using the conversion facts given, decide whether or not Ron's dog is classed as a large breed dog.

You must show your working.

1 stone = 14 lbs

1 kg \approx 2.2 lbs

(4 marks)

18 Mo buys a house for £120 000
He sells the house for £150 000
Work out the percentage profit that Mo makes.

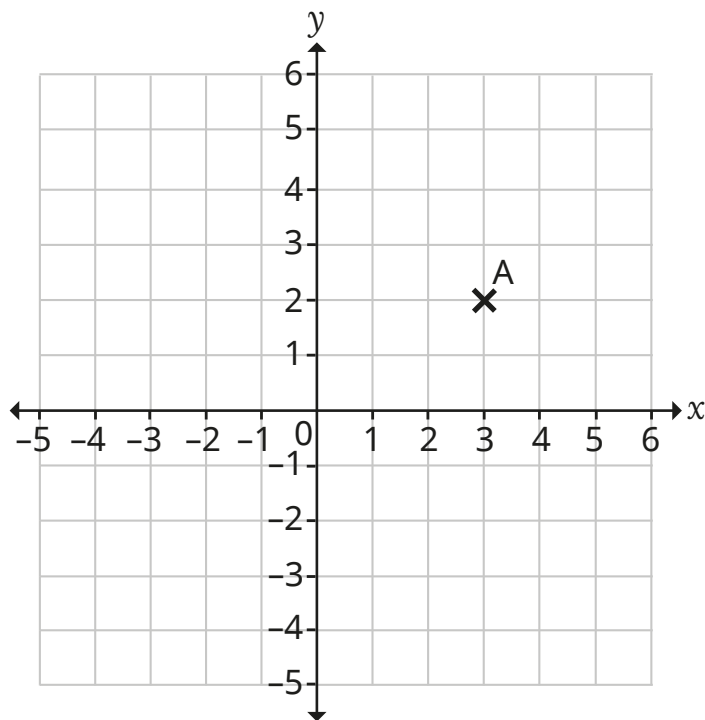
(3 marks)

19 a) Factorise $6a + 3$

(1 mark)

b) Expand and simplify $3(2p - 5) + 2(p + 3)$.

(2 marks)



a) Write down the coordinates of point A.

_____ (1 mark)

Point B has coordinates $(-1, 2)$.

b) Plot point B on the grid.

(1 mark)

ABC is an isosceles triangle.

The coordinates of point C are $(p, 5)$.

c) Find the value of p .

_____ (1 mark)

21 a) Simplify $y^8 \div y^2$

(1 mark)

b) Simplify $(2z^5)^3$

(2 marks)

22 Solve the simultaneous equations.

$$x + 2y = 13$$

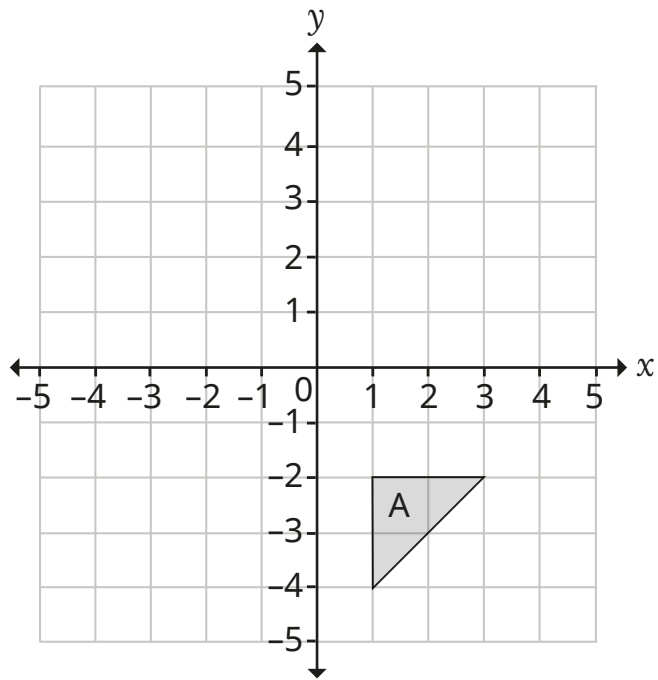
$$x + 5y = 28$$

$$x = \underline{\hspace{10em}}$$

$$y = \underline{\hspace{10em}}$$

(3 marks)

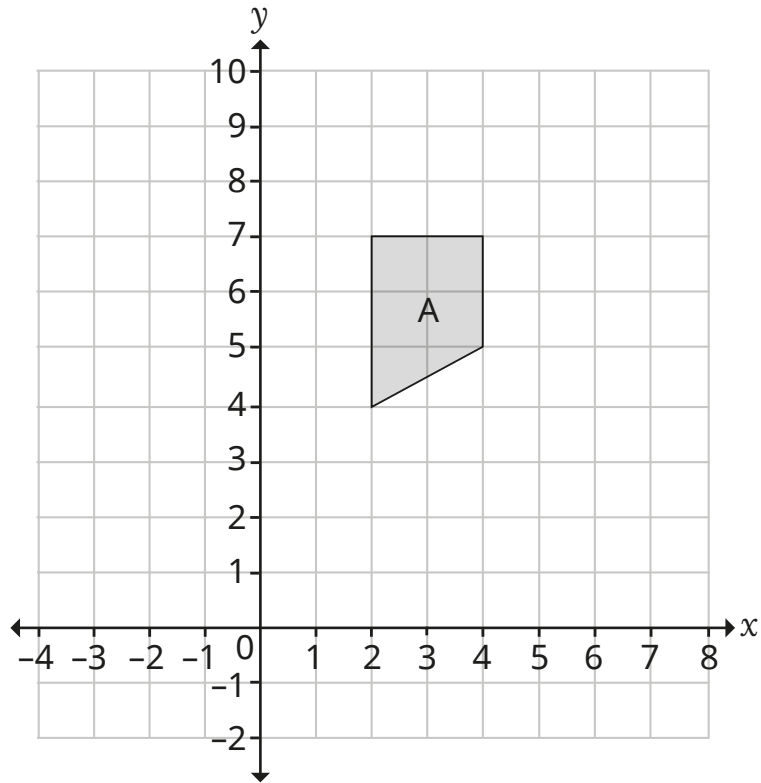
23 a)



Enlarge triangle A by scale factor 2 using (3, -4) as the centre of enlargement.

(3 marks)

b)



Translate trapezium A by the vector $\begin{pmatrix} 4 \\ -3 \end{pmatrix}$.

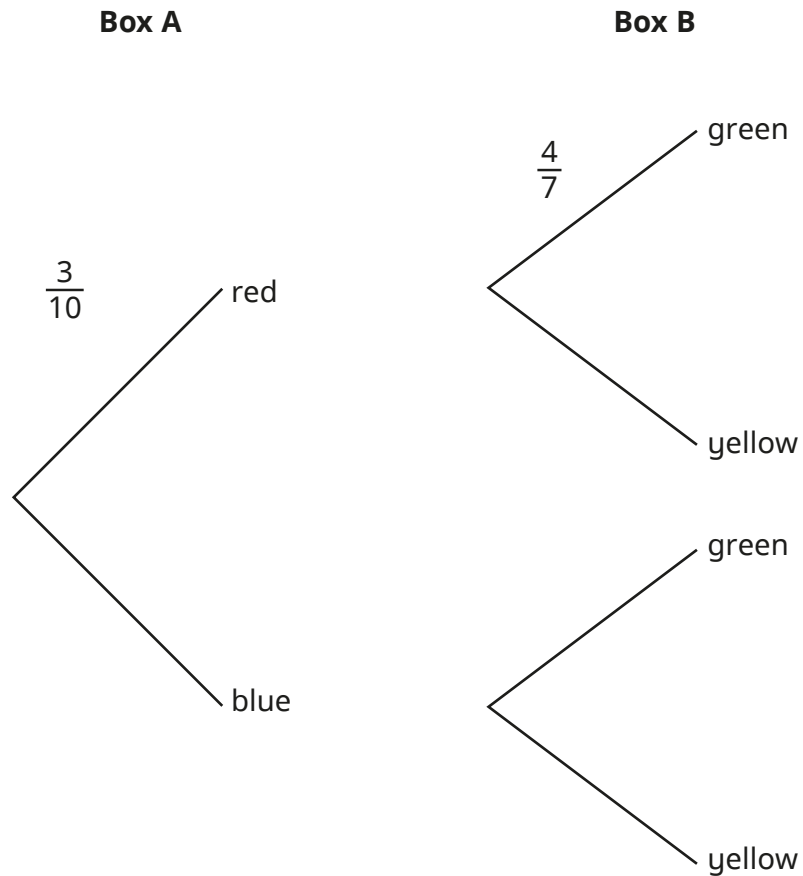
(2 marks)

24 Two boxes each contain some counters.

3 out of the 10 counters in box A are red. The rest are blue.

4 out of the 7 counters in box B are green. The rest are yellow.

a) Complete the probability tree diagram.



(2 marks)

Sam chooses one counter from each box at random.

b) Find the probability that she chooses a blue and a yellow counter.

_____ (2 marks)

25 The table shows the mass of 10 boxes.

Mass (m)	Frequency
$0 \leq m < 2$	1
$2 \leq m < 4$	2
$4 \leq m < 6$	4
$6 \leq m < 8$	1
$8 \leq m < 10$	2

Work out an estimate for the mean mass of the boxes.

(3 marks)

26 In the USA, the cost of a phone is \$1200

In the UK, the cost of the same phone is £920

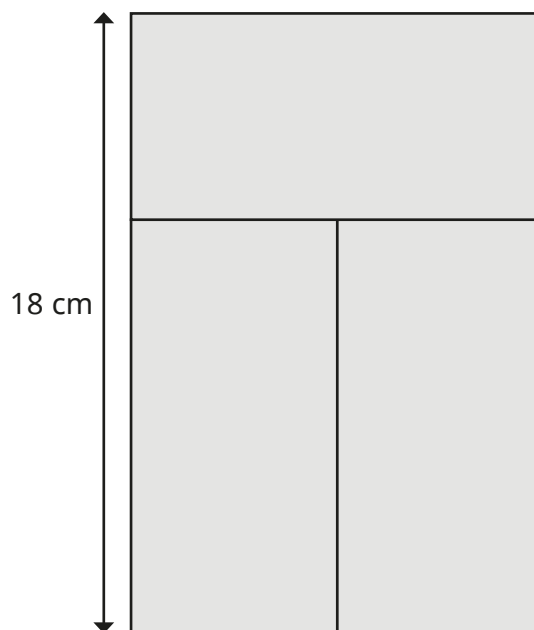
Using the exchange rate £1 = \$1.36, work out the difference in cost of the phone in the USA and the UK.

(2 marks)

27 Mr Singh buys a computer for £2500
Each year the value of the computer depreciates by 7.2%.
Calculate how much the computer is worth after 2 years.

(3 marks)

28 A shape is made from three congruent rectangles.



Work out the area of the shape.

(3 marks)

29 $x : y = 5 : 2$

$x + y = 175$

Work out the value of $x - y$.

(3 marks)

30 The length (l) of a piece of wood is 294 cm when truncated to the nearest centimetre.
Complete the error interval for the length of the piece of wood.

_____ cm $\leq l <$ _____ cm

(2 marks)

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