

Answer **all** questions in the spaces provided.

1 A supermarket advertises sale offers.

1 (a) Darren wants three tins of baked beans.

<p>Baked Beans Normal Price 57 p Offer: Buy two get third free</p>
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How much should he pay?

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Answer £ (2 marks)

1 (b) Steph wants two loaves.

<p>Bread Normal Price £ 1.08 Offer: Buy two loaves and get 2nd for half price</p>

How much should she pay?

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Answer £ (2 marks)

1 (c) Pat wants two cartons of milk.

<p>Milk (4 litre carton) Normal Price £ 1.64 Offer: Buy two for £2.50</p>

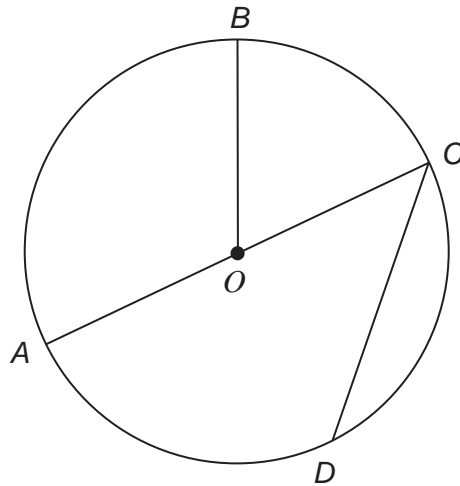
How much will she save using the offer?

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Answer £ (2 marks)

- 2 A, B, C and D are four points on a circle centre O .



- 2 (a) Here are five words that are used with circles.

circumference radius chord diameter sector

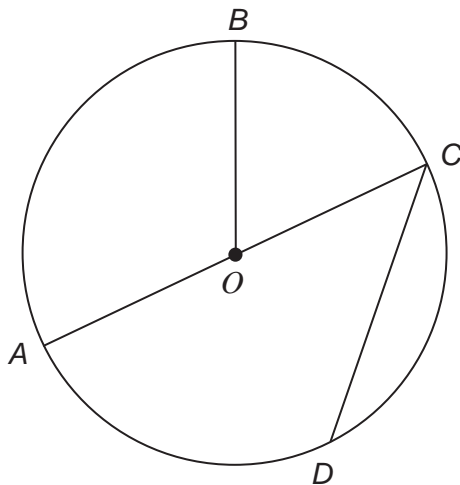
Use **one** of these words to complete the following sentences.

- 2 (a) (i) The straight line AC is a of the circle. (1 mark)

- 2 (a) (ii) The straight line CD is a of the circle. (1 mark)

- 2 (a) (iii) The straight line OB is a of the circle. (1 mark)

- 2 (b) On the diagram below draw a tangent to the circle at point A .



(1 mark)

- * 3 Greg goes shopping with £20.
He spends £5.60 on his lunch.
He needs £1.30 for his bus fare.
He sees this advert for shoes.

Shoes

Normal Price £15

Sale price 10% off normal price

Does he have enough money to buy them?

You **must** show your working

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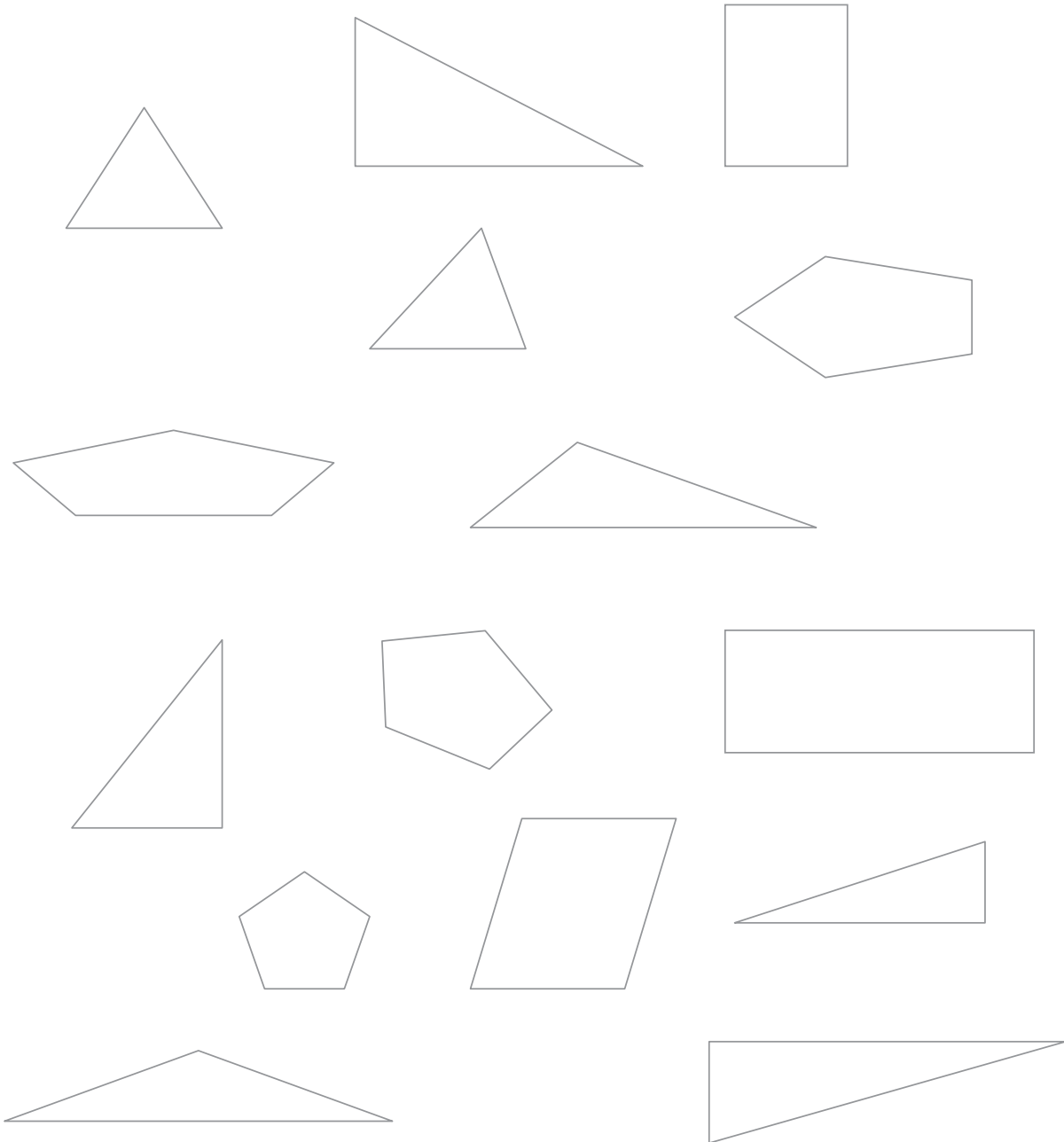
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(4 marks)

Turn over for the next question

* 4 Kia is sorting shapes.

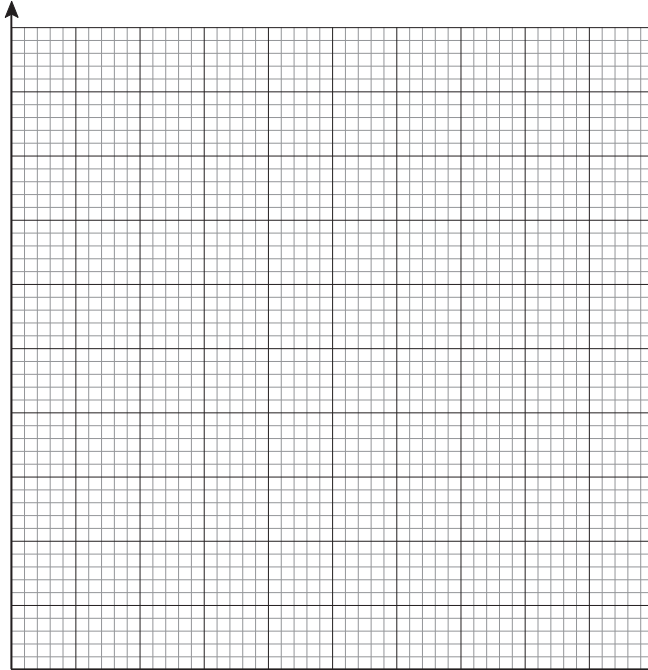


4 (a) Complete the tally table.

	Tally	Frequency
Triangles		
Quadrilaterals		
Pentagons		

(3 marks)

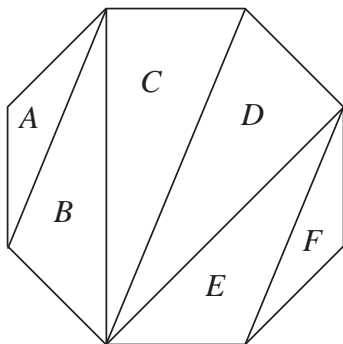
4 (b) On the grid draw a suitable diagram to show this information.



(3 marks)

Turn over for the next question

- 5 A regular octagon is split into triangles A , B , C , D , E and F .

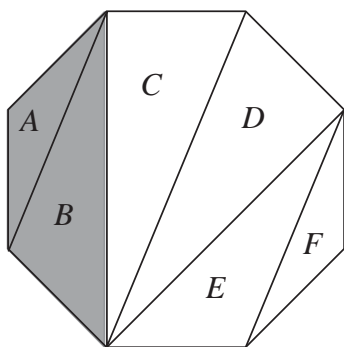


- 5 (a) Complete this list of pairs of congruent triangles.

C and D
 B and
 A and

(2 marks)

- 5 (b) Triangles A and B make a trapezium as shown.

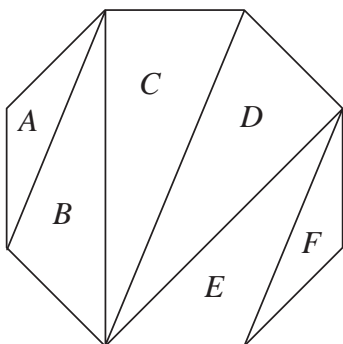


Which of the following triangles also make a trapezium?
 Circle your answers.

B and C C and D D and E E and F

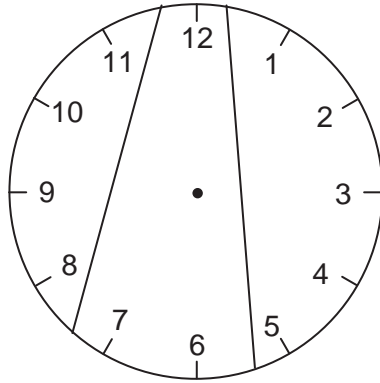
(2 marks)

- 5 (c) Shade **two** triangles in this diagram to make a kite.



(1 mark)

- 6 This clock face has been divided into three parts with two lines.
The totals of the numbers in each part are 38, 25 and 15.

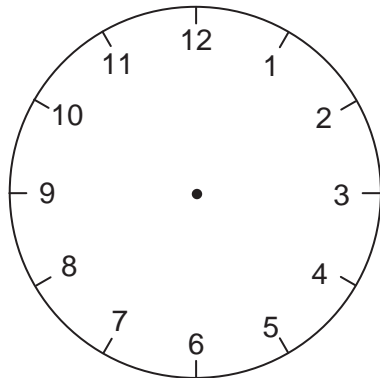


Divide the clock below into three parts with two lines so that the totals of the numbers in the three parts are equal.

Show your working clearly.

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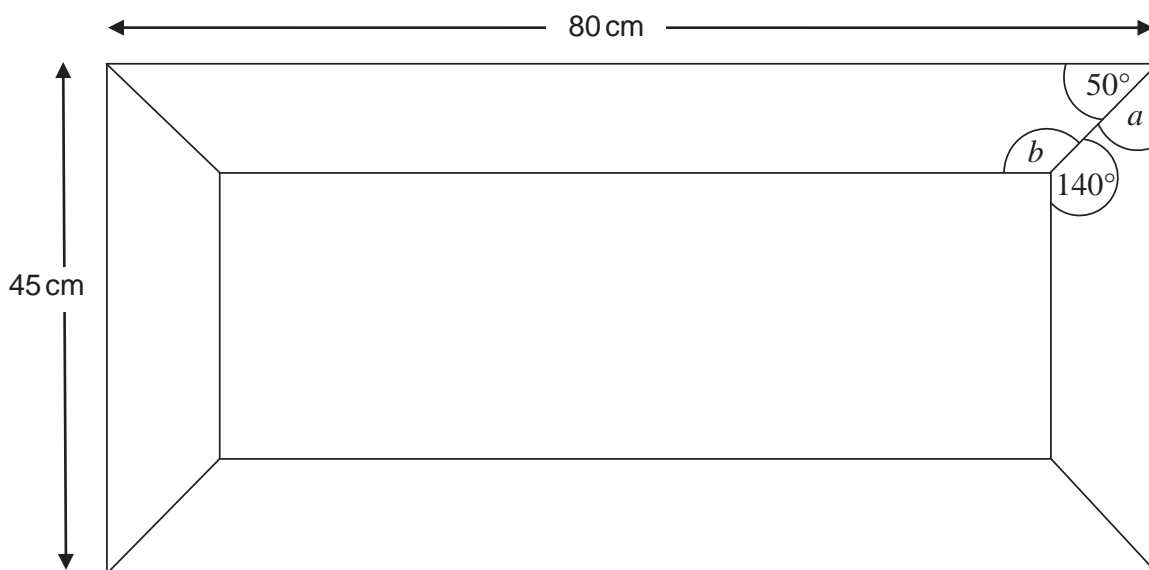
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(2 marks)

Turn over for the next question

7 A rectangular picture frame is made using four pieces of wood.



7 (a) (i) Work out angle a .

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Answer degrees (1 mark)

7 (a) (ii) Work out angle b .

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Answer degrees (2 marks)

7 (b) Work out the total length of the four pieces of wood needed to make the picture frame.
Give your answer in metres.
Show your working clearly.

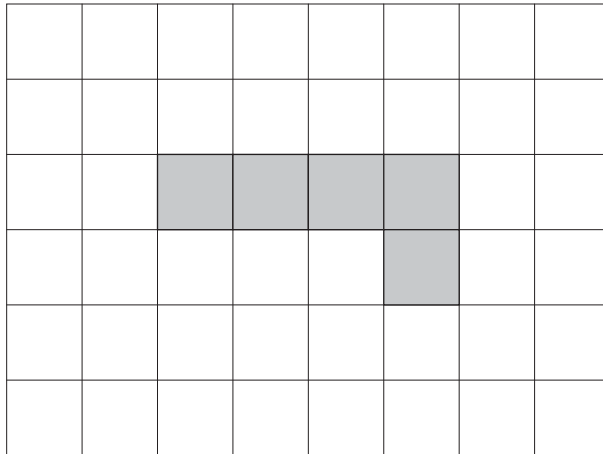
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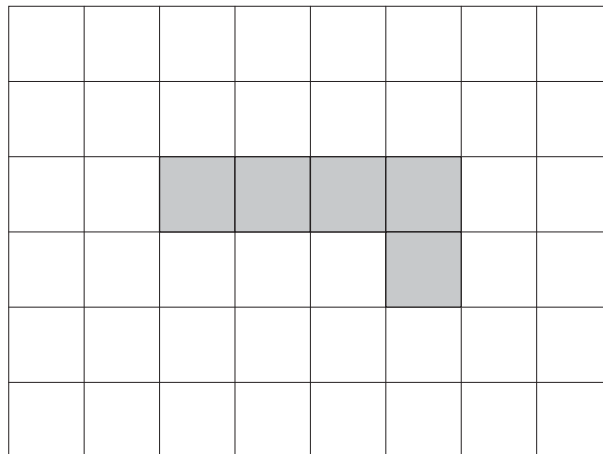
Answer metres (3 marks)

- 8 (a) Shade **one** more square to make a shape with one line of symmetry.



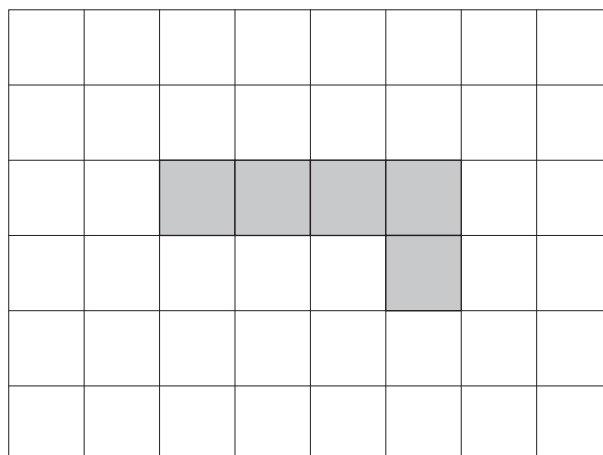
(1 mark)

- 8 (b) Shade **one** more square to make a different shape with one line of symmetry.



(1 mark)

- 8 (c) Shade **one** more square to make a shape with rotational symmetry of order 2.



(1 mark)

9 Harry's garden is a rectangle measuring 9 metres by 6 metres.
He decides to make one-third of the area into a vegetable plot and the rest into a lawn.

9 (a) On the grid draw accurately a possible design for Harry's garden.

Use the scale 1 centimetre represents 1 metre.

Label your design.

1 cm represents 1 m



(4 marks)

9 (b) Lawn turf (grass) costs £2.50 per square metre.

How much will it cost Harry to turf his new lawn?

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Answer £ (3 marks)

- 10 (a)** Use your calculator to work out $\sqrt{7.2}$
Write down all the figures in your calculator display.

Answer (1 mark)

- 10 (b)** Use your calculator to work out 7.2^3

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Answer (1 mark)

- 11 (a)** Work out the value of $2x + y$ when $x = 3$ and $y = 8$

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Answer (1 mark)

- 11 (b)** Simplify $6a + 7b - 2a + b$

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Answer (2 marks)

- 11 (c)** Solve the equation $5w + 6 = 9 - w$

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Answer $w =$ (3 marks)

Turn over for the next question