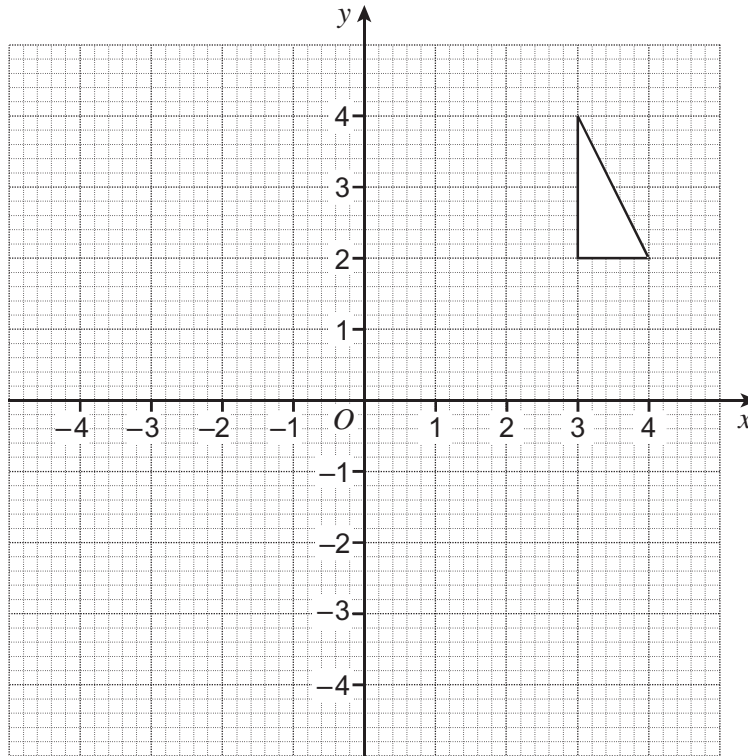


Answer **all** questions in the spaces provided.

- 1 Reflect the triangle in the line $y = 2$



(2 marks)

2

Turn over ►



2 (a) Expand $3(x - 6)$

.....

Answer (1 mark)

2 (b) Factorise $5y - 10$

.....

Answer (1 mark)

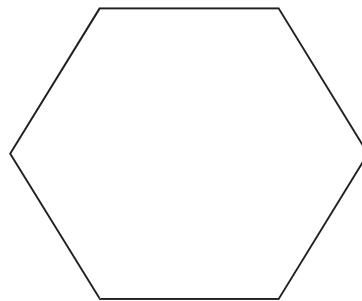
2 (c) Expand and simplify $3(4w + 1) - 5(3w - 2)$

.....

.....

Answer (3 marks)

3 Show that the interior angle of a regular hexagon is 120° .



Not drawn
accurately

.....

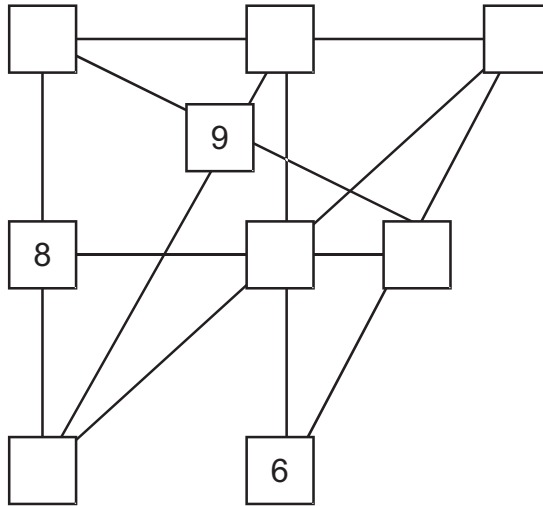
.....

..... (2 marks)

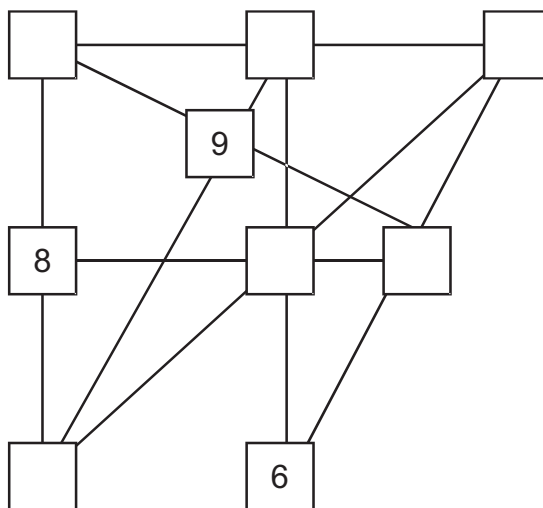


- 4 In the diagram, the three boxes in each straight line have a total of 14.
Complete the diagram using the numbers 1, 2, 3, 4, 5 and 7.

You can use this diagram to practise.



Put your final answer on this diagram.



(3 marks)

10

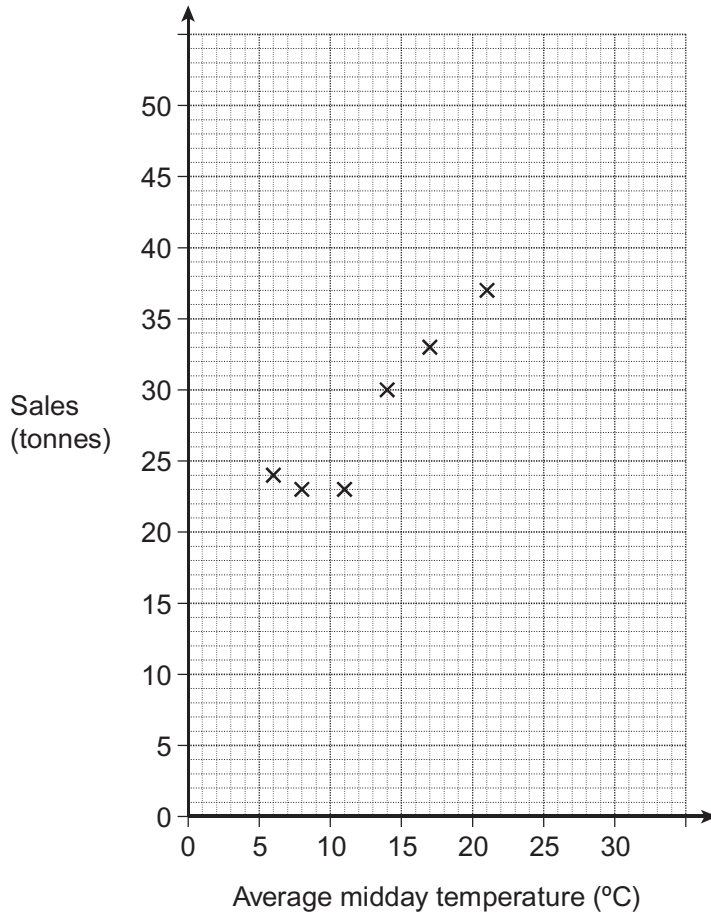
Turn over ►



- 5 A company sells ice cream.
The average midday temperature and the sales for each month in 2011 are shown.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average midday temperature (°C)	8	6	11	14	17	21	22	29	20	14	10	4
Sales (tonnes)	23	24	23	30	33	37	39	47	36	28	22	23

- 5 (a) Complete the scatter diagram by plotting the values for July to December. The values for January to June have been done for you.



(2 marks)



5 (b) In July 2012, the average midday temperature is predicted to be 25°C.

Use the graph to estimate the sales of ice cream in July 2012.
Show clearly how you obtain your answer.

.....
.....
.....

Answer tonnes (2 marks)

5 (c) In December 2012, the average midday temperature is predicted to be 5°C higher than in December 2011.

Should the company increase its production of ice cream for December 2012?
Tick a box.

Yes No

Give a reason for your answer.

.....
.....
.....

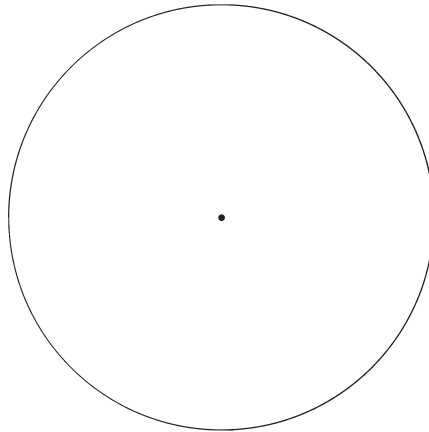
(1 mark)

Turn over for the next question

Turn over ►



6 This circle is drawn accurately.



Work out the area of the circle.
Give your answer in terms of π .

State the units of your answer.

.....
.....
.....

Answer (4 marks)

7 Solve $6x - 5 = 2x + 13$

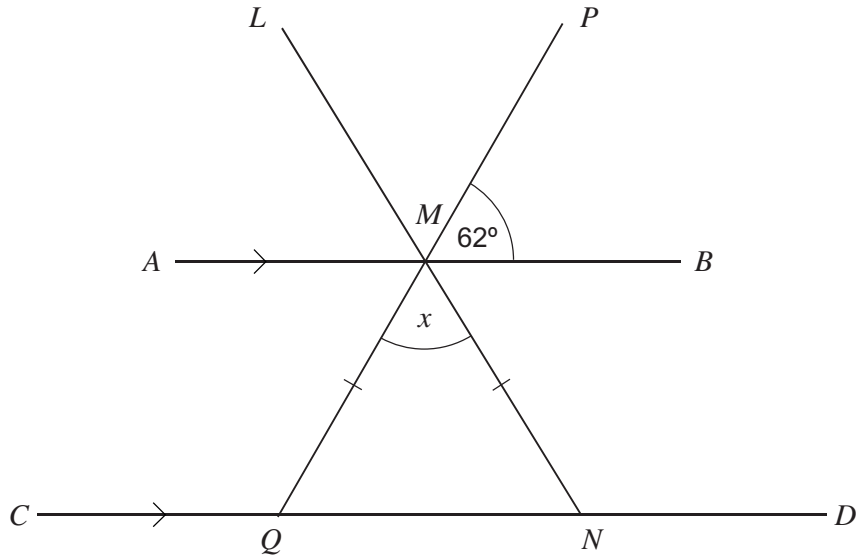
.....
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$x =$ (3 marks)



*8

AB is parallel to CD .
 LMN and PMQ are straight lines.
 $MQ = MN$



Not drawn
accurately

Work out the value of x .

.....

.....

.....

.....

Answer degrees (3 marks)



9 A basketball team has five players and one reserve.

Players

Reserve



The mean weight of the **five** players is 58 kg.
The reserve weighs 64 kg.

Work out the mean weight of all **six** team members.

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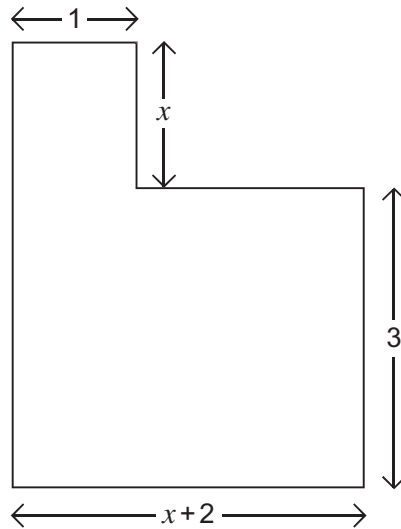
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.....

Answer kg (3 marks)



- 10** The L-shape below has an area of 12 cm^2 .
All corners are right angles.
All lengths are in centimetres.



Not drawn
accurately

Work out the value of x .

.....

.....

.....

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.....

.....

.....

.....

.....

Answer cm (4 marks)

7

Turn over ►

