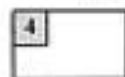**9**

(a) Translate rectangle **R** 4 squares to the left and 2 squares up.
Label it **A**. [1]

(b) Rotate rectangle **R** through 90° clockwise about the origin.
Label it **B**. [3]

4

[Turn over

10 Miss Roberts gave her pupils a task.
    She wrote down the time, in seconds, for each pupil to complete the task.

    73   35   43   89   52   48   29   64   60

(a) (i) Write down the range.

                                            (a)(i) .... s [1]

     (ii) Calculate the mean time.
           Write your answer correct to 1 decimal place.

                                            (ii) .... s [4]

(b) Two months later they did a similar task.
     The mean time was 59·7 seconds and the range 52 seconds.

     Make one comment about their performance in these two tasks.

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

                                                                              6

11 Here are the first four terms of a sequence.

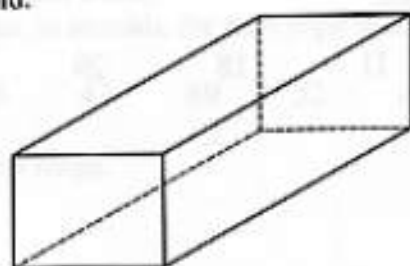8   11   18   29

(a) Write down the next two terms.

(a) .... [2]

(b) The first term of another sequence is 8.
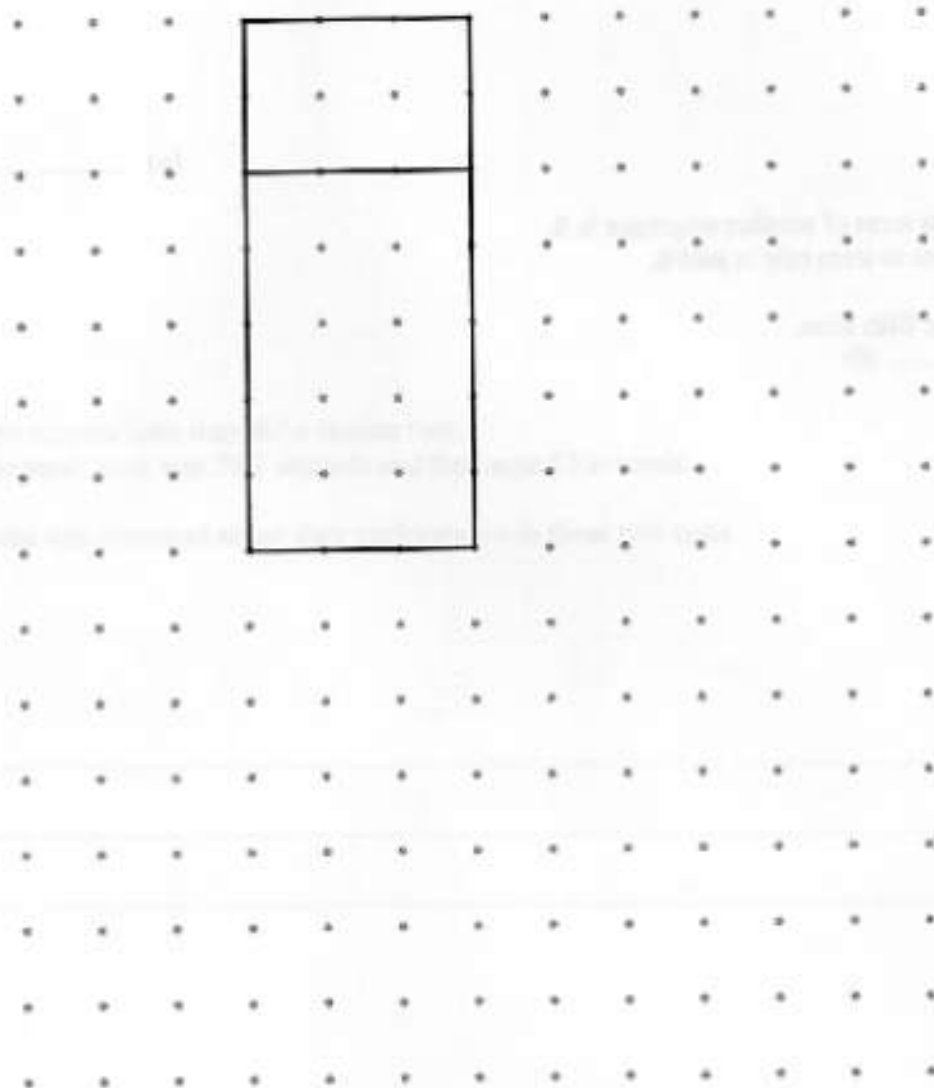The term to term rule is **add 6**.

Find the fifth term.

(b) .... [1]
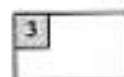
3

[Turn over

12 Here is a sketch of a cuboid.

Complete the net of the cuboid.

[3]

13 Solve.

(a) $x - 6 = 15$

(a) $x =$ .... [1]

(b) $2x + 7 = 16$

(b) $x =$ .... [2]

3

14 Sea water contains 3% salt.

What weight of salt is there in a jar containing 250 g of sea water?

.... [3]

3

TURN OVER FOR QUESTION 15

15 Glen goes on an activity day.
The activities available are listed below.

Morning: clay modelling (C), painting (P), woodwork (W), needlecraft (N).
Afternoon: sculpture (S), design (D), electronics (E).

He chooses one morning activity and one afternoon activity.

(a) Complete the table below showing all the different choices he could make.
You may not need all the lines.

Morning	Afternoon
C	S
C	D

[2]

(b) Explain why the probability that Glen will choose electronics in
the afternoon may not be $\frac{1}{3}$.

....

....

....[1]

3