YEAR 7
MATHS

Name: _____

4. (a) Write down the coordinates of the point

(i) *A*,

(…… , ……)

(ii) *C*.

(…… , ……)

(2)

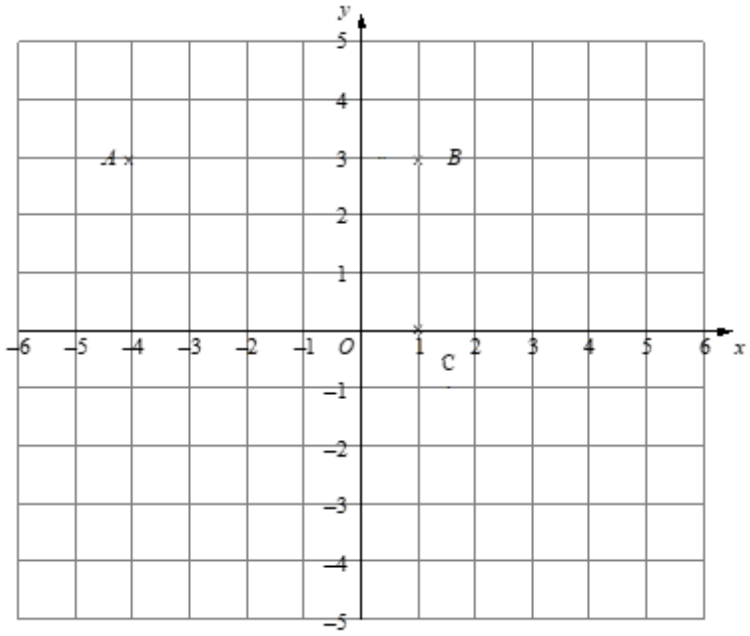
(b) (i) On the grid, mark the point *D* so that *ABCD* is a rectangle.

(ii) Write down the coordinates of *D*.

(…… , ……)

(2)

(Total 4 marks)



5. (a) Write down the coordinates of the point *A*.

(…… , ……)

(1)

(b) Write down the coordinates of the point *B*.

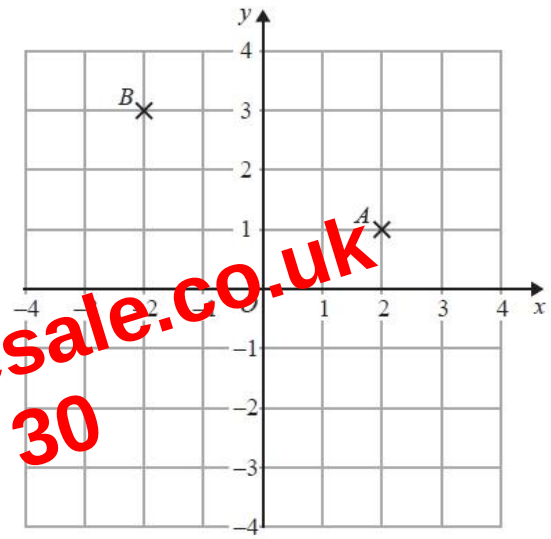
(…… , ……)

(1)

(c) On the grid, mark with a cross (×) the point (−3, −1). Label this point *C*.

(1)

(Total for question = 3 marks)



6. (a) (i) Write down the coordinates of the point *A*.

(…… , ……)

(ii) Write down the coordinates of the point *B*.

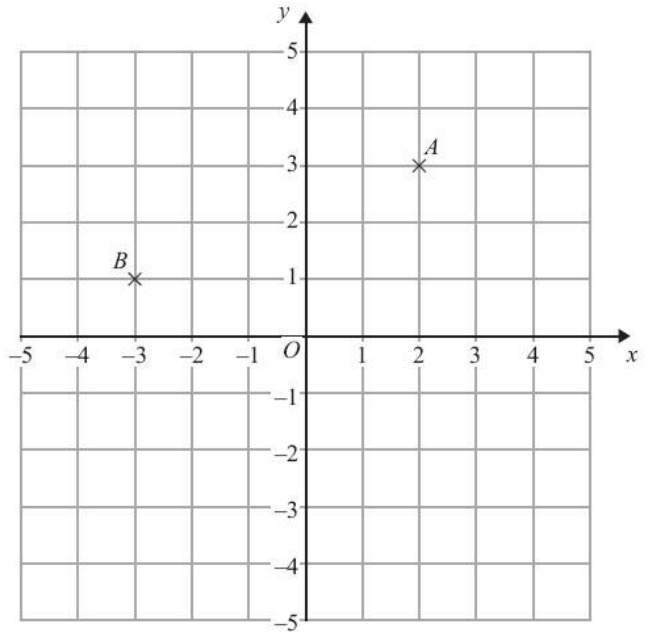
(…… , ……)

(2)

(b) On the grid, mark with a cross the point (3, –4). Label this point *C*.

(1)

(Total for Question is 3 marks)



5. Here are some patterns made from sticks.

Pattern number 1 Pattern number 2 Pattern number 3

(a) Draw Pattern number 4 in the space below.

(1)

(b) How many sticks are needed for Pattern number 12?

…….

(2)

Sunil says that he will need 70 sticks for Pattern number 20

(c) Is Sunil correct? You must give a reason for your answer.

…….

…….

…….

(2)

(Total for Question is 5 marks)

6. Here are the first 6 terms of a number sequence.

5 9 13 17 21 25

(a) Write down the next term of the sequence.

…….

(1)

(b) (i) Work out the eleventh term of the sequence.

…….

(ii) Explain how you found your answer.

…….

…….

…….

(2)

(Total for Question is 3 marks)

4. (a) Simplify $a \times c \times 3$

.....

(1)

(b) Simplify $p \times p \times p$

.....

(1)

(c) Simplify $5x - 4y + 3x - 3y$

.....

(2)

(Total for Question is 4 marks)

5. (a) Simplify $5a - 2a$

.....

(1)

(b) Simplify $3 \times 4y$

.....

(1)

(c) Simplify $3e + 4f + 2e \times 4$

.....

(2)

(Total for Question is 4 marks)

3. (a) Solve $6g = 18$

$g =$ . . . . . .

(1)

(b) Solve $5h + 7 = 17$

$h =$ . . . . . .

(2)

(Total for Question is 3 marks)

4. (a) Solve $x + 9 = 19$

$x =$ . . . . . .

(1)

(b) Solve $2y = 17$

$y =$ . . . . . .

(1)

(c) Solve $\frac{w}{4} = 8$

$w =$ . . . . . .

(1)

(Total for Question is 3 marks)

5. (a) Solve $\frac{n}{7} = 2$

$n =$ . . . . . .

(1)

(b) Solve $3g + 4 = 19$

$g =$ . . . . . .

(2)

(Total for Question is 3 marks)