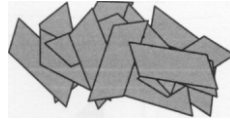


# 1. Tiles

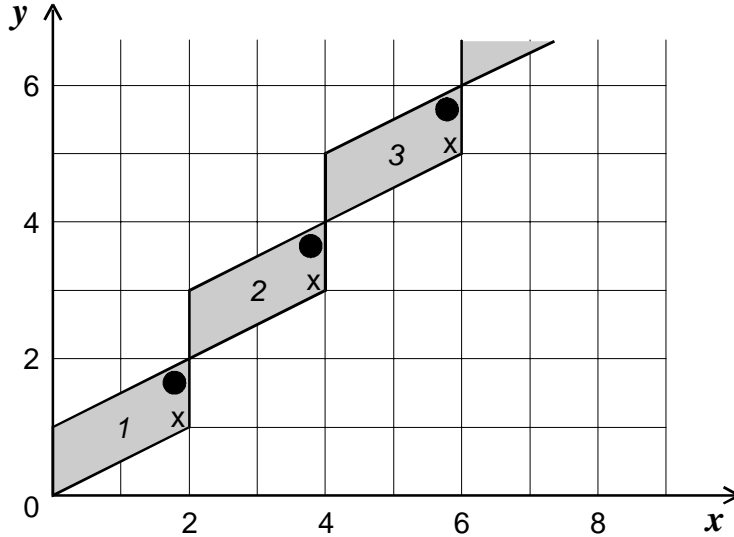
Daniel has some parallelogram tiles.



He puts them on a grid, in a continuing pattern.

He numbers each tile.

The diagram shows part of the pattern of tiles on the grid.



Daniel marks the **top right corner** of each tile with a ●

The co-ordinates of the corner with a ● on **tile number 3** are **(6, 6)**

(a) What are the co-ordinates of the corner with a ● on **tile number 4**?



(..... , .....)

1 mark

(b) What are the co-ordinates of the corner with a ● on **tile number 20**?



(..... , .....)

1 mark

Explain how you worked out your answer.

1 mark

(c) Daniel says:



One tile in the pattern has a ●  
in the corner at (25 , 25)

Explain why Daniel is **wrong**.



1 mark

(d) Daniel marks the **bottom right corner** of each tile with a **X**

Fill in the table to show the co-ordinates of each corner with a **X**



tile number	co-ordinates of the corner with a X
1	(...2..., ...1...)
2	(....., .....)
3	(....., .....)
4	(....., .....)

1 mark

Fill in the missing numbers below.



(e) Tile number **7** has a **X** in the corner at (..... , .....

1 mark



(f) Tile number ..... has a **X** in the corner at (**20, 19**)

1 mark

Total 7 marks