Co-ordinate Problems

1. Marv plots (3, 3). He adds the two co-ordinate points together to get 6.

   He continues to plot co-ordinate points so that the sum is **one more** each time.
   So, the next co-ordinate sum will be 7 and so on.

   Marv says the points will make a vertical line.
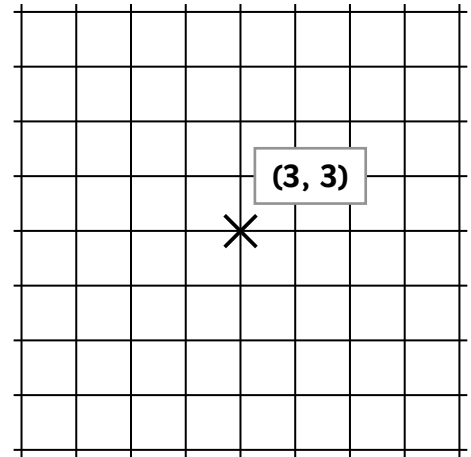   His friend, Vena, says the line will be horizontal.

   Use the grid to work out why they could **both** be correct.
   Fill in the possible co-ordinates for the next four points.

   Vertical line:

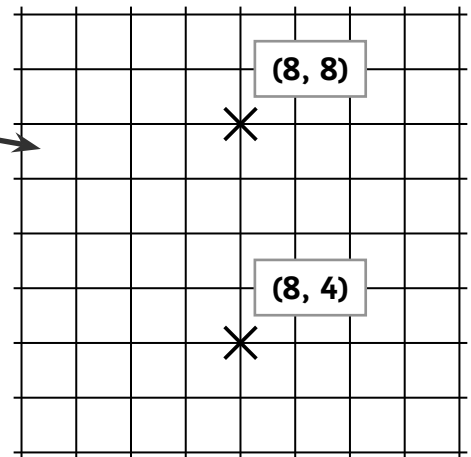   (3, 3), (......, ...), (......, ...), (......, ...), (......, ...)

   Horizontal line:

   (3, 3), (......, ...), (......, ...), (......, ...), (......, ...)

   (3, 3)

2. Marv plots (8, 8) and (8, 4) on another grid.
   What other points could he plot to make a square?

   ....
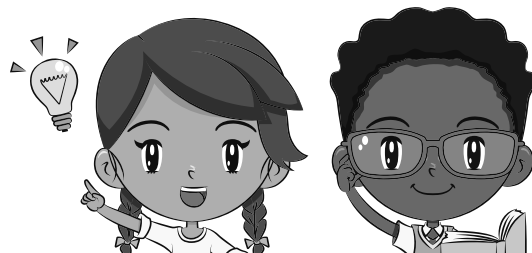
   (8, 8)

   (8, 4)

3. Marv and Vena are making tile patterns. They use the
   same sized tiles each time. They work out some co-ordinates
   of Tile 1. Find the remaining co-ordinates of the tiles.

   y

   Tile 2

   (1, 3)

   Tile 1

   (1, 1)   (4, 1)

   x
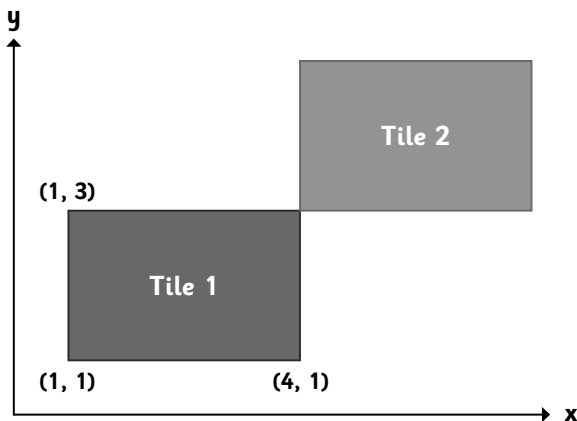
   Tile 1: (1,1), (4,1) (1,3) ....

   Tile 2: ....

CGP

Co-ordinate Problems

1. Marv plots (3, 3). He adds the two co-ordinate points together to get 6.

   He continues to plot co-ordinate points so that the sum is **one more** each time.
   So, the next co-ordinate sum will be 7 and so on.

   Marv says the points will make a vertical line.
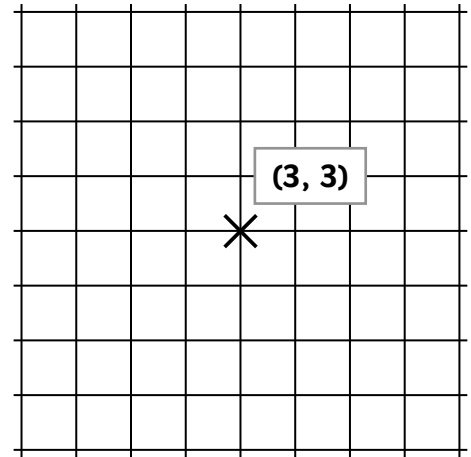   His friend, Vena, says the line will be horizontal.

   Use the grid to work out why they could **both** be correct.
   Fill in the possible co-ordinates for the next four points.

   Vertical line:

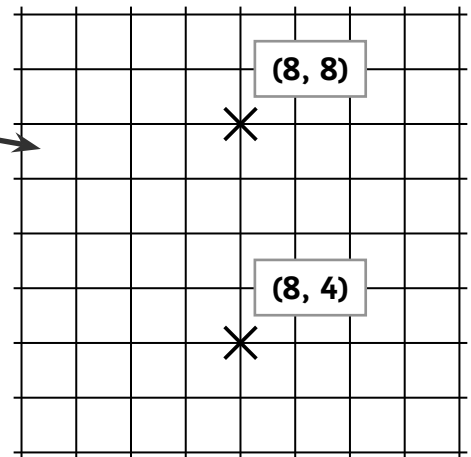   **(3, 3)**, (3 , 4), (3 , 5), (3 , 6), (3 , 7)

   Horizontal line:

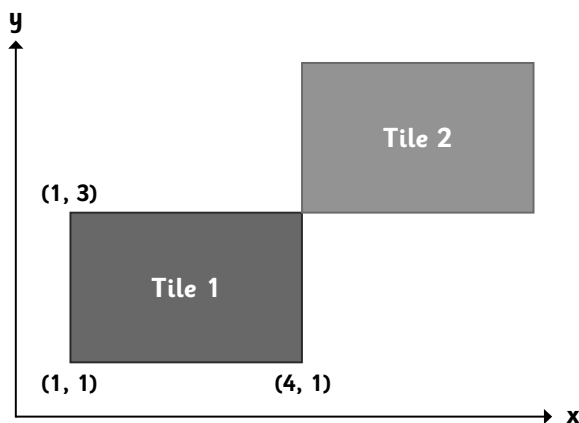   **(3, 3)**, (4 , 3), (5 , 3), (6 , 3), (7 , 3)

   (3, 3)

2. Marv plots (8, 8) and (8, 4) on another grid.
   What other points could he plot to make a square?

   (4, 8) and (4, 4) OR (12, 8) and (12, 4)

   (8, 8)

   (8, 4)

3. Marv and Vena are making tile patterns. They use the
   same sized tiles each time. They work out some co-ordinates
   of Tile 1. Find the remaining co-ordinates of the tiles.

   y

   Tile 2

   (1, 3)

   Tile 1

   (1, 1)   (4, 1)

   x

   Tile 1: (1,1), (4,1) (1,3) (4, 3)

   Tile 2: (4, 3), (4, 5), (7, 3), (7, 5)