1) Ramesh has plotted a coordinate in the first quadrant.

a) If the coordinate was moved one place to the left, which digit would change?

_____

b) If the coordinate was moved three places down, which digit would change?

_____

c) What would the new coordinates be? (,   )
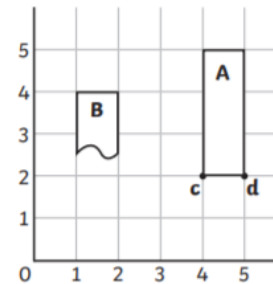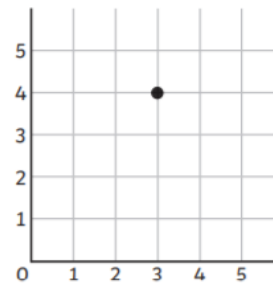
2) James has translated rectangle A to its new position, B.

a) What is the translation? _____

b) What are the coordinates of the two missing vertices? Plot and label c and d.

c (,   )

d (,   )

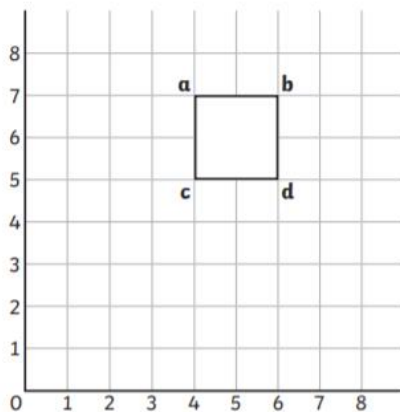**1)** Swarvek has plotted the vertices of a square.

True or False?

a) If the square was translated to the left, the y coordinate would change. _____

b) The square has been translated and vertex A is now at (3,3). The translation is (4 down, 1 left). _____
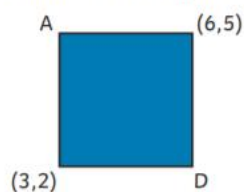
c) The square is being translated up and down. The only coordinate to change is the second digit. _____

d) The coordinates of the translated square could be (5,6), 6,6), (5,7) and (7,7). _____
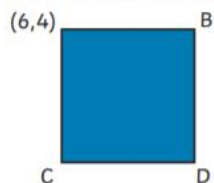
1) Shauna has translated a square in the first quadrant (2 left, 4 down). Here is the translated square. What were the original coordinates of vertex D?

A _____ (6,5)

(3,2) _____ D

Original coordinates of vertex D (,   )

2) The same square has now been moved to a different place on the first quadrant. Celia has given one set of coordinates for one of the vertices. Describe the translation.

(6,4) _____ B

C _____ D

The translation is (,   )

3) Look at the triangle on the 5 × 5 grid. How many different ways can you find of translating it so that it moves but stays entirely on the grid? Try to work systematically to find all the possbilities.