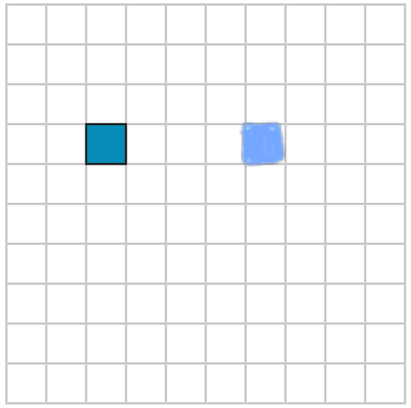
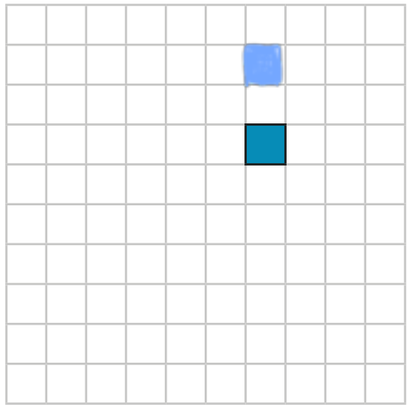
Translation

1 Complete the translations.

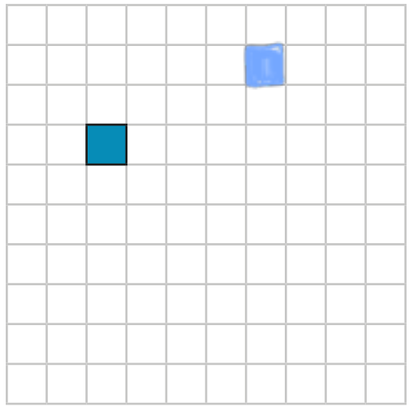
a) Translate the shape 4 squares to the right.



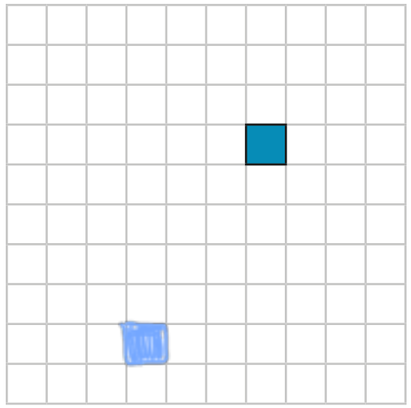
b) Translate the shape 2 squares up.



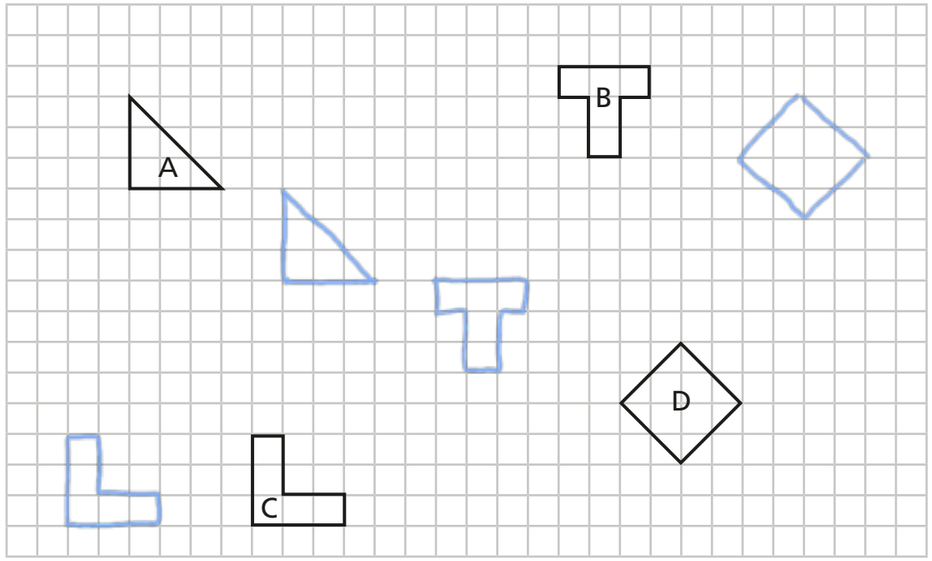
c) Translate the shape 4 squares right, 2 squares up.



d) Translate the shape 3 squares left, 5 squares down.



2 Four shapes have been drawn on a grid.



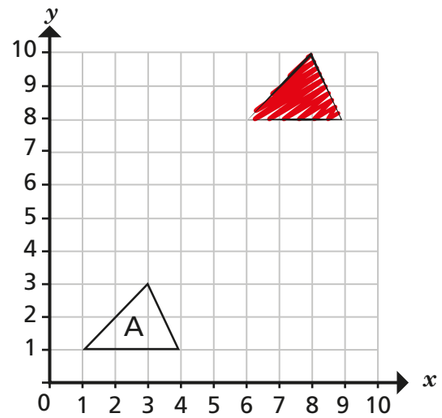
a) Translate shape A 5 squares to the right and 3 squares down.

b) Translate shape B 4 squares to the left and 7 squares down.

c) Translate shape C 6 squares to the left.

d) Translate shape D 4 squares to the right and 8 squares up.

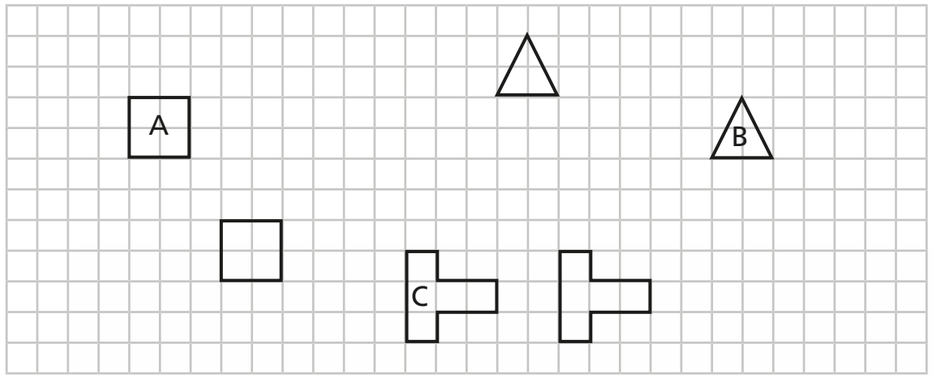
3 Dora has translated triangle A 2 squares to the right and 7 squares up.



Is Dora's drawing correct? No

Explain why.

4 Complete the sentences to describe the translations.

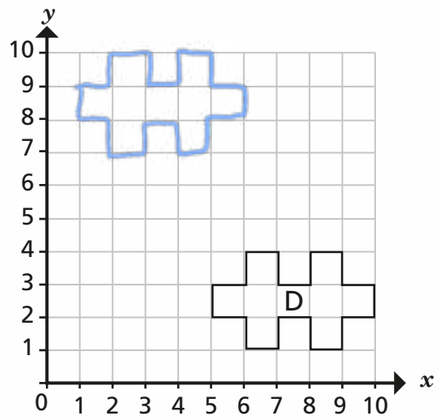


a) Shape A has been translated [3] squares to the right and [4] squares down.

b) Shape B has been translated [7] squares to the [left] and [2] squares [up]

c) Shape C has been translated [5] squares to the [right] and [0] squares [up / down]

5 A shape has been drawn on a coordinate grid.



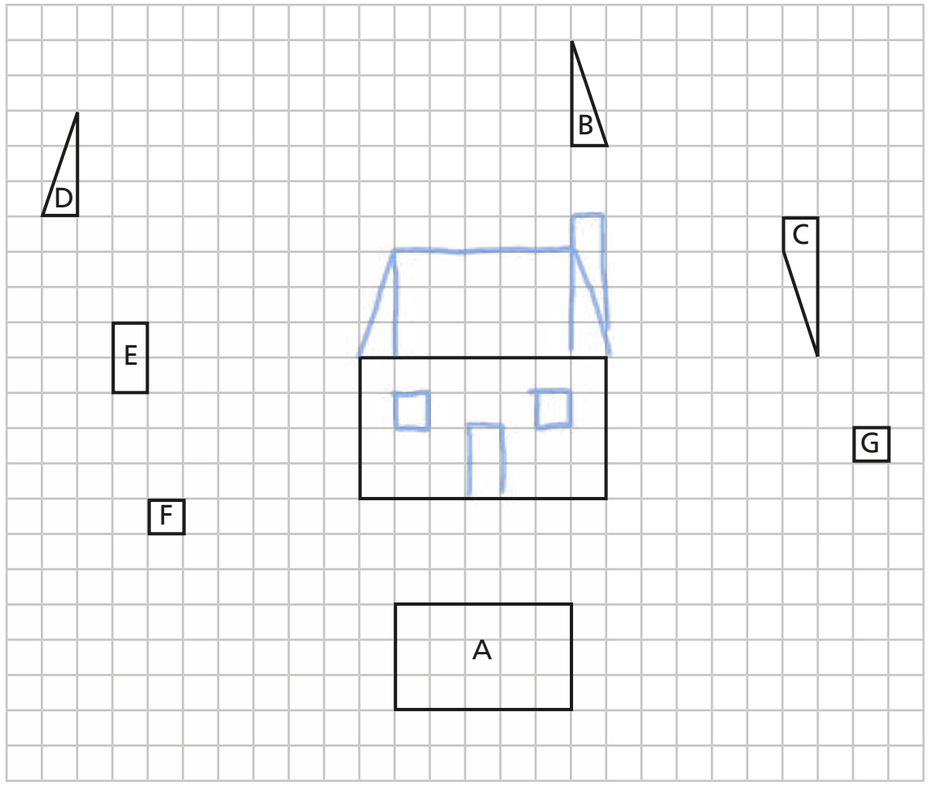
a) Translate shape D 4 squares to the left and 6 squares up. Label the new shape E.

b) Describe the translation from shape E to shape D.

[4 squares to the right and 6 squares down.]

What do you notice? Does this always happen?

6 Eight polygons are drawn on the grid.



a) Translate shape A 10 squares up.

b) Translate shape B 6 squares down.

c) Translate shape C 6 squares left.

d) Translate shape D 9 squares to the right and 4 squares down.

e) Translate shape E 10 squares to the right and 3 squares down.

f) Translate shape F 7 squares to the right and 3 squares up.

g) Translate shape G 9 squares to the left and 1 square up.

Create your own problem like this for a partner.