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? 
   Explain why.
4. Complete the sentences to describe the translations.

a) Shape A has been translated __ squares to the right and __ squares down.

b) Shape B has been translated __ squares to the ____________

and __ squares ____________

c) Shape C has been translated __ squares to the ____________

and __ squares ____________

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.

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.

What do you notice? Does this always happen?