Mathematics

Transformations: Reflections Worksheet
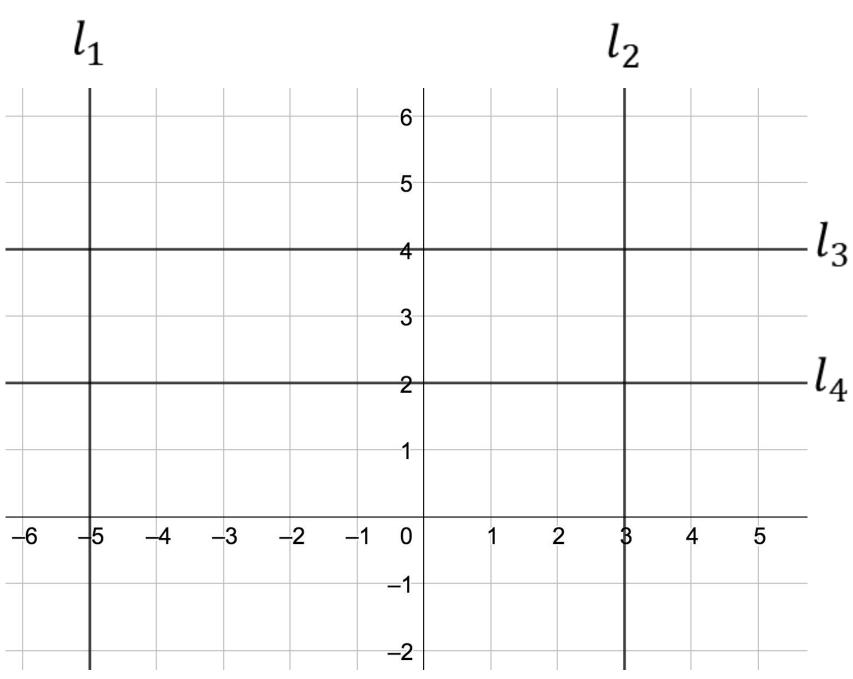
Mrs Buckmire

Try this

For each of the lines labelled l_1, l_2, l_3, l_4 find:

A Three coordinates that lie on the line, with at least one off the grid.

B The equation of the line.

I wonder where l_3 and l_4 would intersect a line with equation $x = -19$ ...
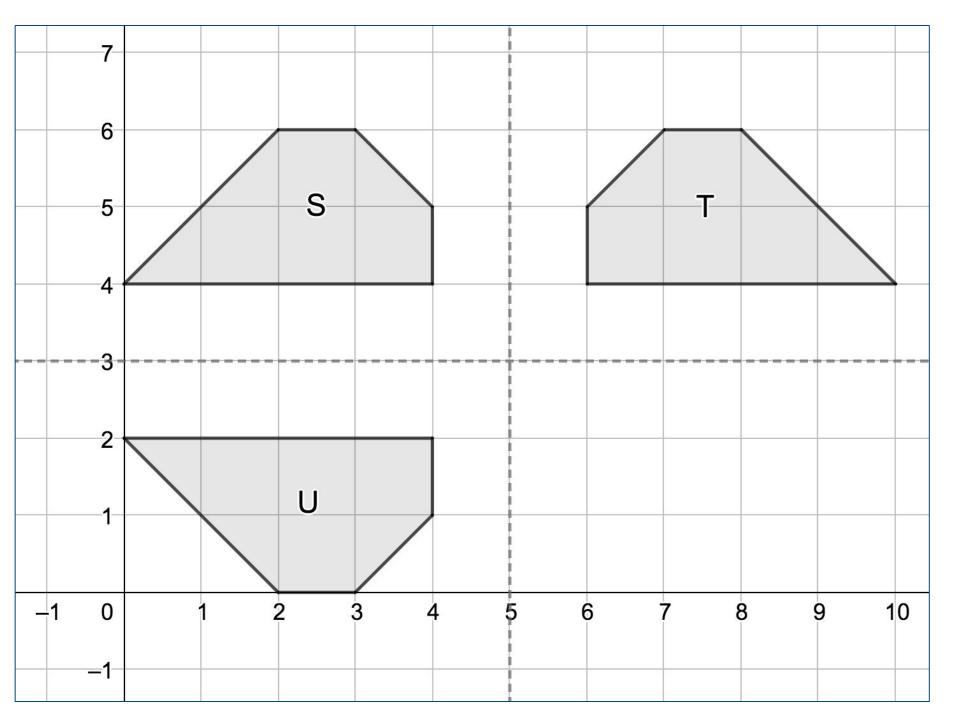
Connect

T and U are reflections of S. What are the lines of reflection?

Explore the effect on the **reflected images** if **S is translated** by the vectors:

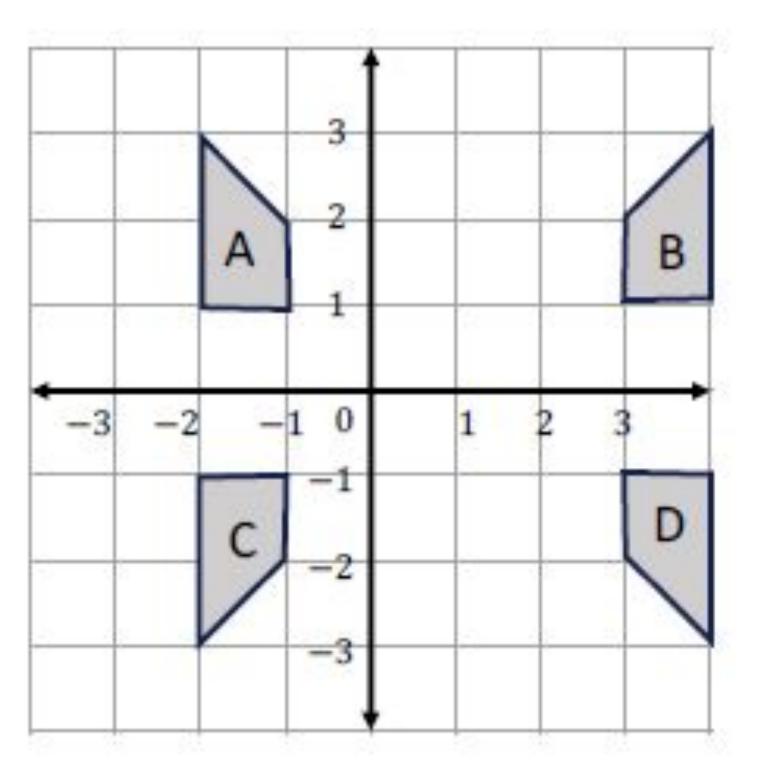| If S translated by:	... T translated by:	... U translated by:
$\begin{pmatrix} 1 \\ 0 \end{pmatrix}$		
$\begin{pmatrix} 0 \\ 1 \end{pmatrix}$		
$\begin{pmatrix} 1 \\ -1 \end{pmatrix}$		

Independent task (page 1 of 2)

Describe the following transformations:
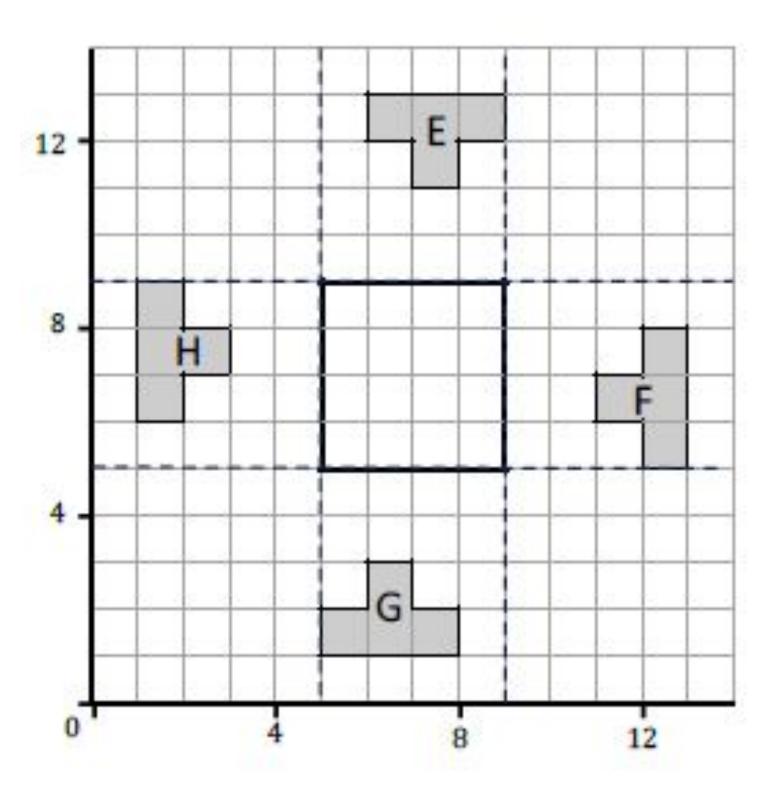
a) A to B

b) B to D

c) A to C

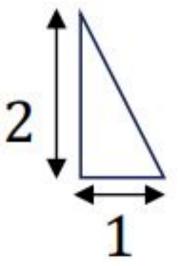d) C to B

Independent task (page 2 of 2)

a) Reflect the octagons E,F,G and H so that they form a tessellation inside the square.

b) Describe the four reflections.

Explore

Four copies of the triangle are arranged as follows:

a) Describe the transformation from B to C.

b) Describe the transformation from C to D.

c) Describe the transformation from D to B.