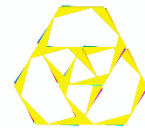




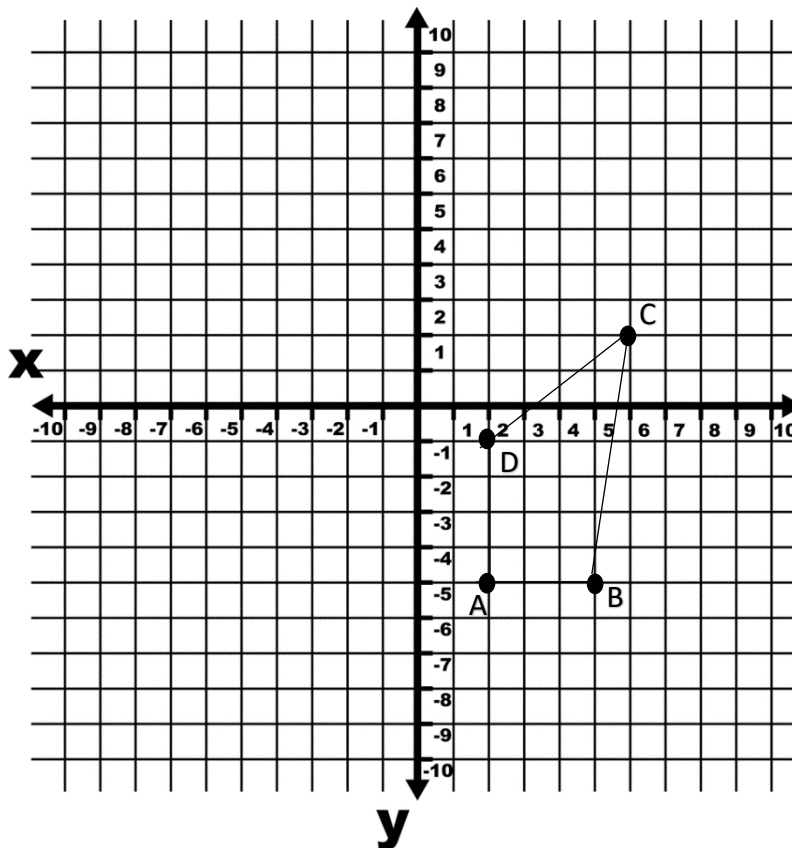
Grade 9 - Mathematics

Transformation Geometry 4



Activity

1. On the cartesian plane below, draw in the line $y = x$



2. Look at the shape that has been plotted on the cartesian plane.
a. Give the co-ordinates for each vertex in the shape

- b. Reflect ABCD across the line $y = x$ to give the quadrilateral $A^1B^1C^1D^1$

- c. Would you say that the two quadrilaterals are congruent? Give a reason.



3. On the cartesian plane below,
- draw in the line $y = x$
 - plot the co-ordinates to form shape EFGHI, where E(3; -7), F(3; -4), G(5; -2), H(7; -4) and I(7; -7)
 - Reflect shape EFGHI across the line $y = x$.
 - Write down the co-ordinates for E'¹F'¹G'¹H'¹I'¹.

- e. Are the two shapes congruent? Give a reason.

