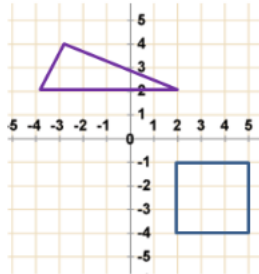
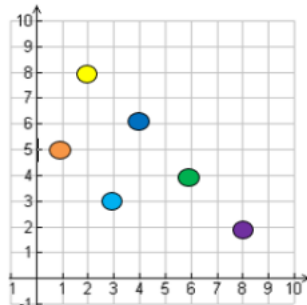


Fluency

- Write down the co-ordinates of the vertices of the shapes below.



- Chandler draws a map of his town.



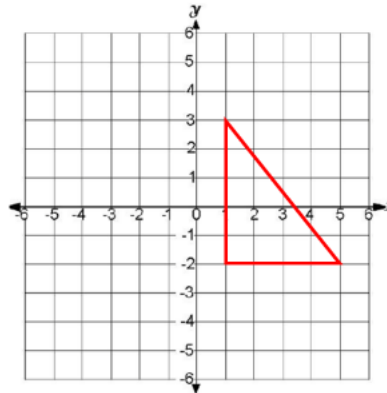
Key: ● My house ● School
● Shop ● Cinema
● Park ● Ice rink

What is at these co-ordinates?

- a) (3,3) b) (6,4)

Reasoning

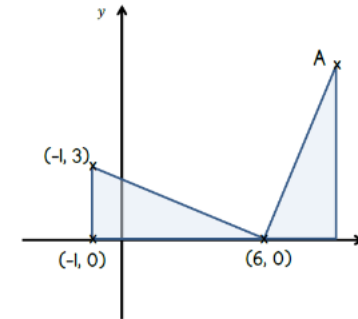
- Nina says that the vertices are in the coordinates: (3,1), (-2,1) and (-2,5). Explain her mistake.



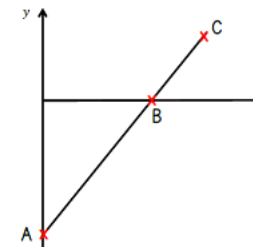
- A square has two vertices at (-2,-1) and (1,-1). What will the other two coordinates be to make the square complete? Is there more than one possibility?
- A square has two vertices at (2,1) and (5,4). What will the other two coordinates be to make the square complete? Explain why there is only one possibility.

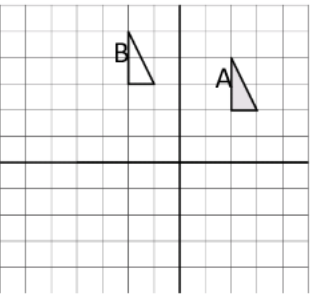
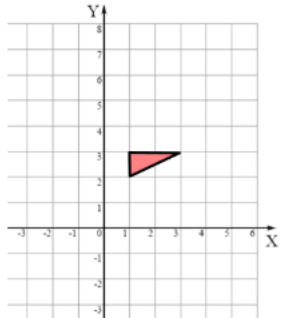
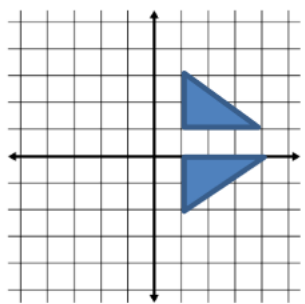
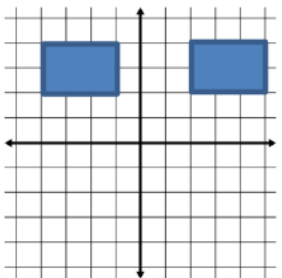
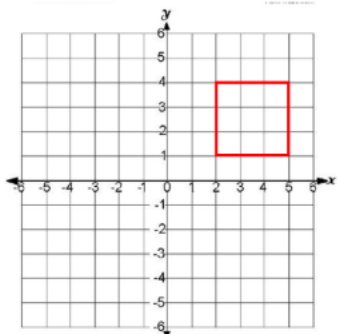
Problem Solving

- The diagram shows two identical triangles. The co-ordinates of three points are shown. Find the co-ordinates of point A.



- A is the point (0, -10)
B is the point (8, 0)
The distance from A to B is two thirds of the distance from A to C.
Find the coordinates of C.



Fluency	Reasoning	Problem Solving
<ul style="list-style-type: none"> Describe the single translation that takes A to B.  <ul style="list-style-type: none"> Reflect the triangle in the y axis.  <p>Hannah translates the triangle 2 squares to the right and 5 squares down. Find the new coordinates of the triangle.</p>	<ul style="list-style-type: none"> Two squares have the following co-ordinates: Square A: (3, 5) (7, 5) (3, 9) (7, 9) Square B: (1, 1) (5, 1) (1, 5) (5, 5) <p>Describe the translation of square A to B and then from B to A.</p> <ul style="list-style-type: none"> Sometimes, always, never. <p>If a shape is translated to the left and down, it stays in the same quadrant</p> <p>Explain your decisions</p> <ul style="list-style-type: none"> Phil has completed the reflection in the x axis  <p>Is Phil correct? Justify your answer</p>	<ul style="list-style-type: none"> How many ways can you describe the translation from one rectangle to the other?  <p>How else you can describe how the rectangle has got from one quadrant to the other?</p> <ul style="list-style-type: none"> Bob wants to 'transform' the square from one quadrant to another.  <p>How many ways can he do this?</p>