1)

b) (1,3) (2,4) (3,4) (2,3) (3,2) (2,2)

2)

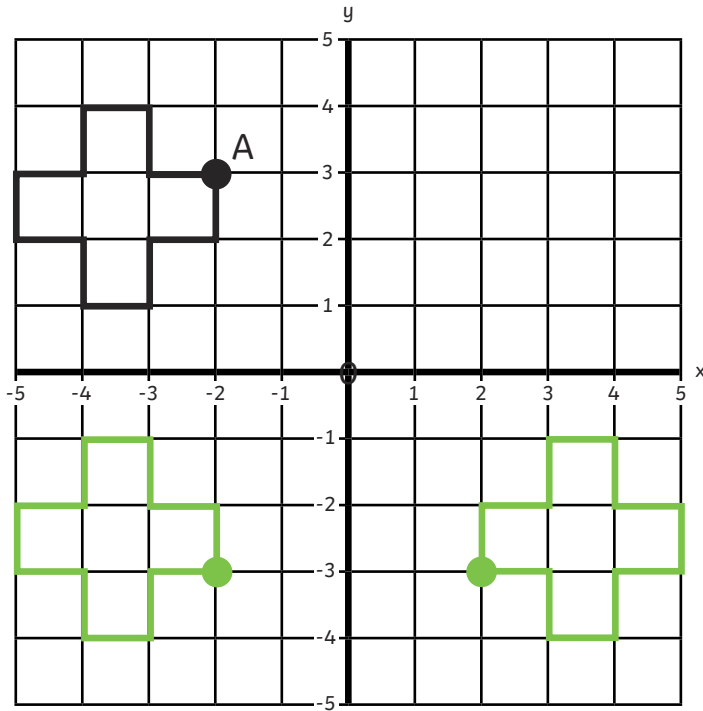**b)** (−3,−2) (−2,−2) (−1,−3) (−2,−4) (−3,−4) (−2,−3)
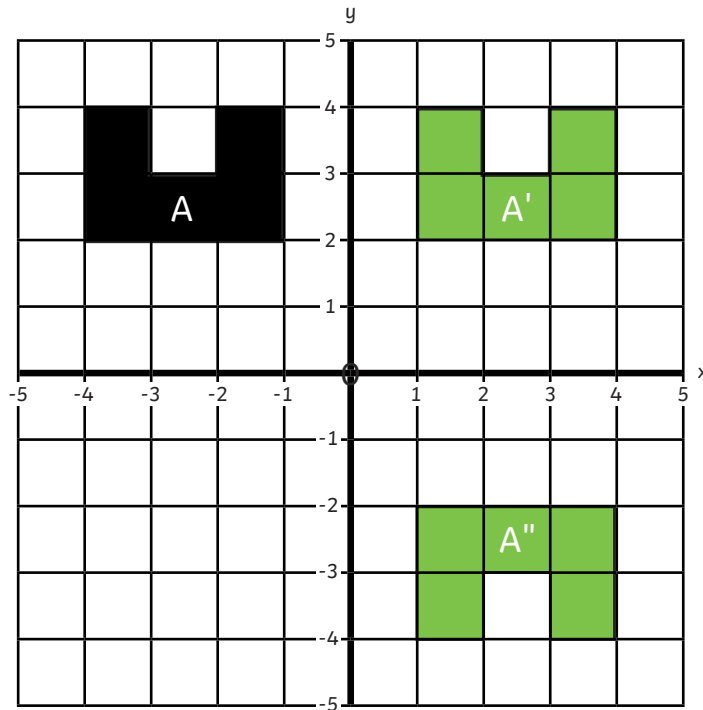
3)
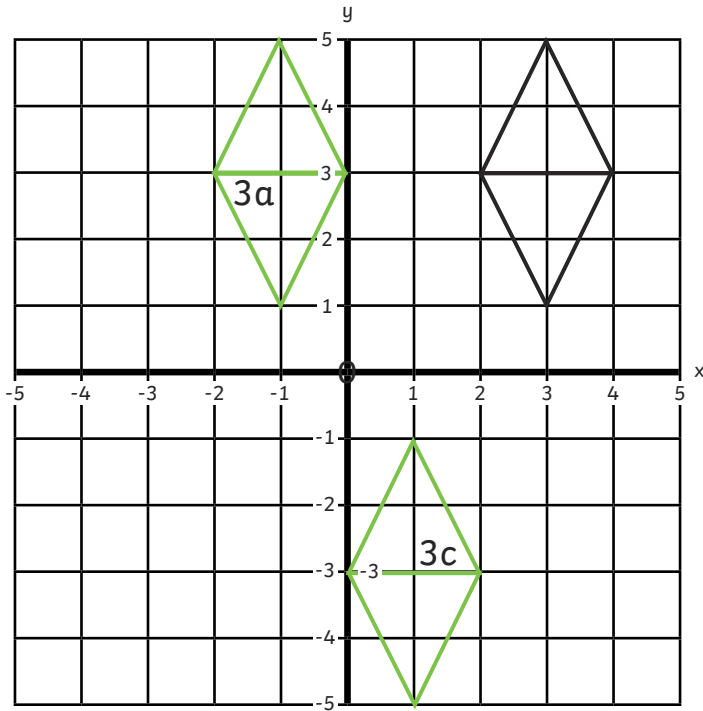
b) (0,3) (−1,1) (−2,3) (−1,5)

d) (1,−1) (0,−3) (1,−5) (2,−3)

1) Jacob is incorrect. He has given the coordinate for the wrong vertex. Vertex A is now at (2,-3) following both reflections.
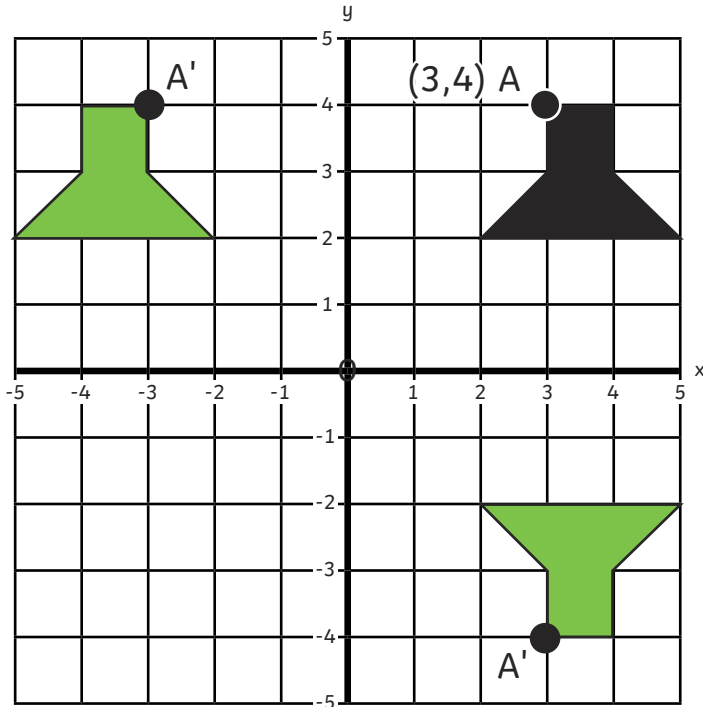

2) Meeta's shape has not been correctly reflected in the x-axis. She has used the correct axis but her shape has not been reflected. Meeta has just drawn her shape on the other side of the axis.

1) *Answers will vary depending on the shape the children have drawn. In this example answer, the reflections of the original shape are shown in green.*

After a reflection in the x-axis, the coordinates for point A are (3,-4). After a reflection in the y-axis, the coordinates for point A are (-3,4).

When you reflect the shape in the x-axis, the coordinates of vertex A still have the same digits, but the positive and negative signs of the y coordinate are reversed. For example, (3,4) becomes (3,-4). When you reflect the shape in the y-axis, the coordinates of vertex A still have the same digits, but the positive and negative signs of the x coordinate are reversed. For example, (3,4) becomes (-3,4).

2) *Some letters, such as the H example shown, will not change when reflected in both axes. This is the same for the letters X, I and O. This may also be true for the letters B and D, depending on how they are drawn by the children.*