

## Further Challenge

- 1) a) If you reflect a square in a vertical line, which coordinates will change and which will stay the same? Why?  
*The x coordinate will change as it moves to the side; the y coordinate stays the same because the shape doesn't go any higher.*
- b) Which coordinates will change if you reflect a square in a horizontal line?  
*The y coordinate will change as the shape moves up or down.*
- c) Investigate if this is the same for other shapes.  
*Encourage children to draw and reflect shapes to carry out their investigations. Can they prove that only one coordinate changes if they reflect any shape in a horizontal or vertical line?*