42 Quadrilateral *KLMN* is shown on the coordinate grid below.

Copy the coordinate grid and quadrilateral *KLMN* exactly as shown onto the grid in your Student Answer Booklet.

Quadrilateral *KLMN* will be translated 9 units up.

a. On your grid, draw quadrilateral *K′L′M′N′*, the image of quadrilateral *KLMN* after it has been translated 9 units up. Be sure to label the vertices.

Quadrilateral *K′L′M′N′* will be reflected over the *y*-axis.

b. On your grid, draw quadrilateral *K″L″M″N″*, the image of quadrilateral *K′L′M′N′* after it has been reflected over the *y*-axis. Be sure to label the vertices.

c. Explain whether a 180° rotation of quadrilateral *KLMN* about the origin would result in vertices with the same coordinates as *K″L″M″N″*.

Quadrilateral *K″L″M″N″* will be rotated 90° clockwise about point *M″* to create quadrilateral *K‴L‴M‴N‴*.

d. What are the coordinates of point *K‴*?