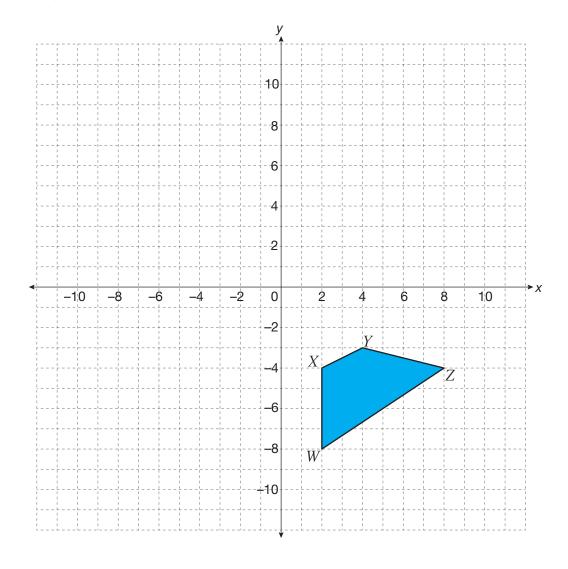


## **Practice - Part 1**

**Instructions:** Answer each of the following practice questions on a separate piece of paper. Step by step solutions are provided under the Solutions tab. You will learn the material more thoroughly if you complete the questions before checking the answers under the Solutions tab in Moodle.

1. Rotate quadrilateral  $W\!XY\!Z\,180^\circ$  and then translate the image horizontally 2 units to the left and vertically 3 units up. State the coordinates of each vertex of the final transformed image,  $W''\!X''\!Y''\!Z''$ .



2. Rotate quadrilateral  $PQRS~270^{\circ}$  counterclockwise and then translate the shape horizontally 7 units to the left and vertically 4 units down. State the coordinates of each vertex of the final transformed image, P''Q''R''S''.

