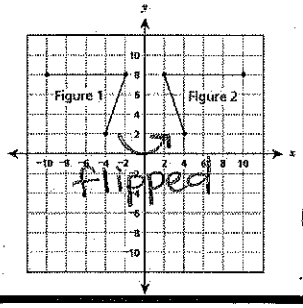
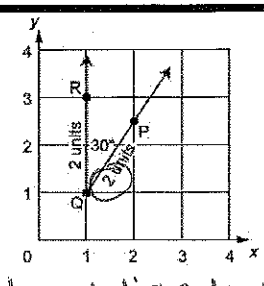
8.G.1 verify experimentally the properties of rotations, reflections, and translations.



Which transformation moves Figure 1 to Figure 2?

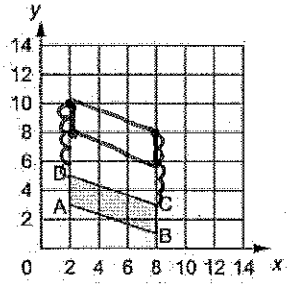
A) dilation
B) rotation
C) reflection
D) translation



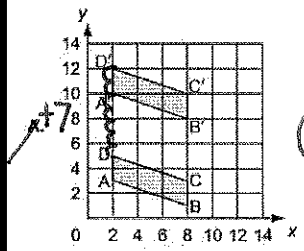
A translation of angle PQR 6 units down and 3 units to the right results in angle P'Q'R'. What is the length of segment Q'P'?

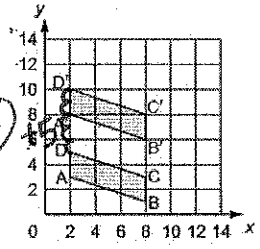
A) 2 units B) 3 units
C) 6 units D) 30 units

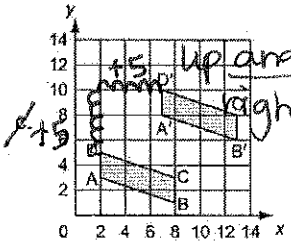
translations lead to congruent figures

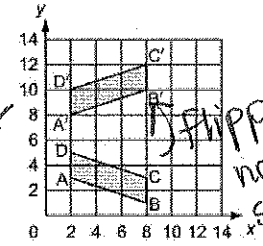


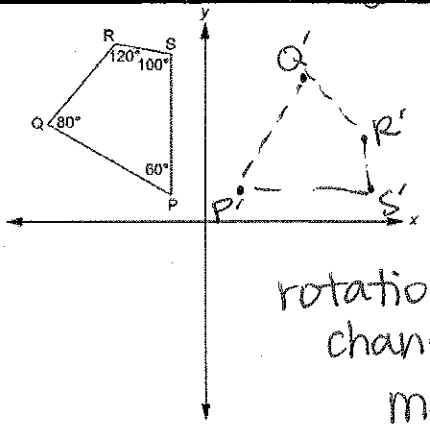
Zane translated the parallelogram up 5 units. Which coordinate grid shows the transformation?









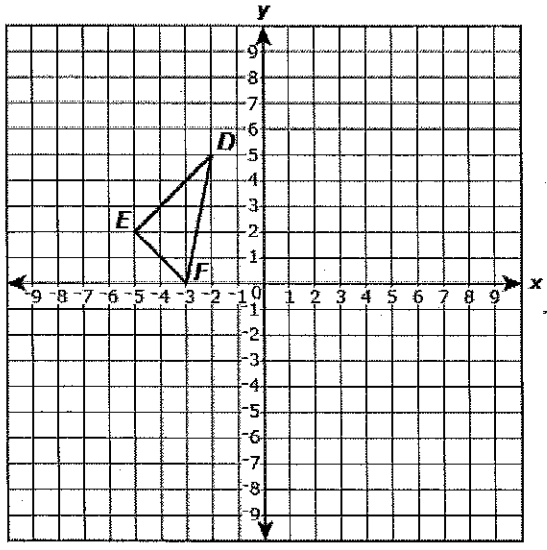


rotations do not change angle measure.

If quadrilateral PQRS will be rotated 90 degrees clockwise about the origin resulting in quadrilateral P'Q'R'S'. Which statement is true?

A) RS will be parallel to R'S'
B) SP will be parallel to R'S'
C) The measure of angle P' will be 80 degrees
D) The measure of angle Q' will be 80 degrees

Triangle DEF is translated 1 unit down and 6 units to the right. It is then rotated 180 degrees about the origin to create a new triangle D'E'F'.



Part A: Liam says that the distance in units between the original point D and the original point E is greater than the corresponding distance of the new triangle, line D'E'. Is Liam correct? Explain.

No, the distance DE should be congruent to D'E' because translations & rotations do not change a figure's size.

Part B: If angle D has a measure of 45 degrees. What is the measure of D'?

$m\angle D' = 45°$ because translations & rotations don't change angle measure.