

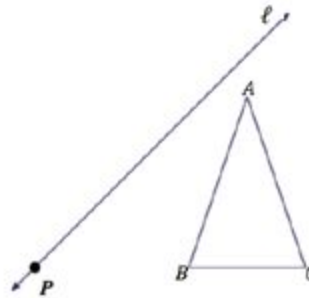
Lesson 2.3.2: Similarity Transformation Practice

Targets:

1. I can construct a similarity transformation.

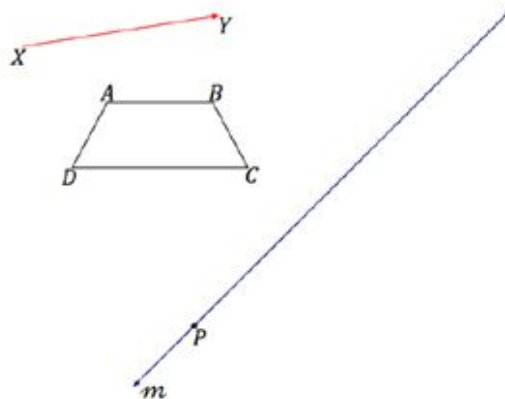
Practice 1

Similarity transformation G consists of a rotation about the point P by 90° , followed by a dilation centered at P with scale factor $r = 2$, and then a reflection across line ℓ . Find the image of the triangle.



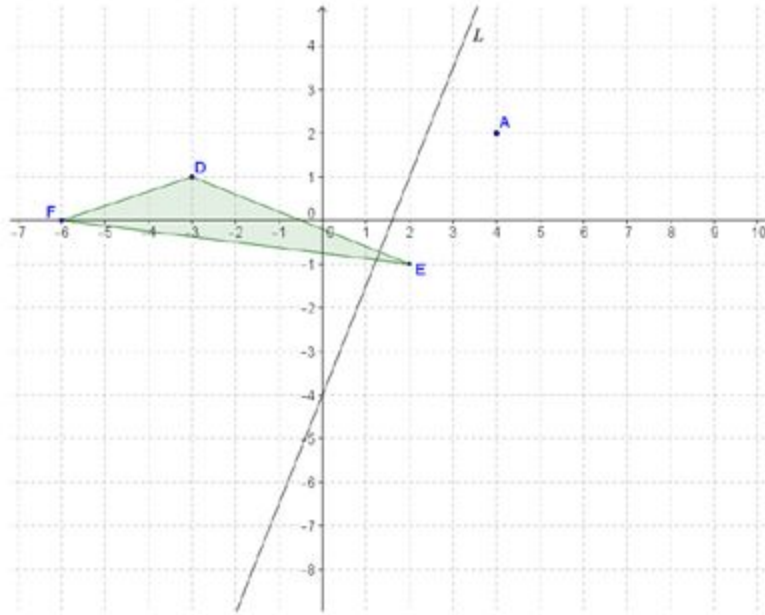
Practice 2

A similarity transformation G applied to trapezoid $ABCD$ consists of a translation by vector \overrightarrow{XY} , followed by a reflection across line m , and then followed by a dilation centered at P with scale factor $r = 2$. Recall that we can describe the same sequence using the following notation: $D_{P,2}(r_m(T_{XY}(ABCD)))$. Find the image of $ABCD$.



Practice 3

A similarity transformation for triangle DEF is described by $r_m \left(D_{A, \frac{1}{2}} \left(R_{A, 90^\circ}(DEF) \right) \right)$. Locate and label the image of triangle DEF under the similarity.



Exit Ticket

A similarity transformation consists of a translation along the vector \overrightarrow{FG} , followed by a dilation from point P with a scale factor $r = \frac{1}{2}$, and finally a reflection over line m . Use construction tools to find $A'''C'''D'''E'''$.

