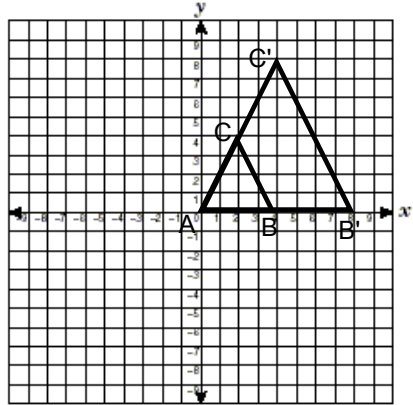


5.5 Similarity Transformations

Students will be able to transform a shape using dilations

Using Dilations to Map Figures Onto Each Other

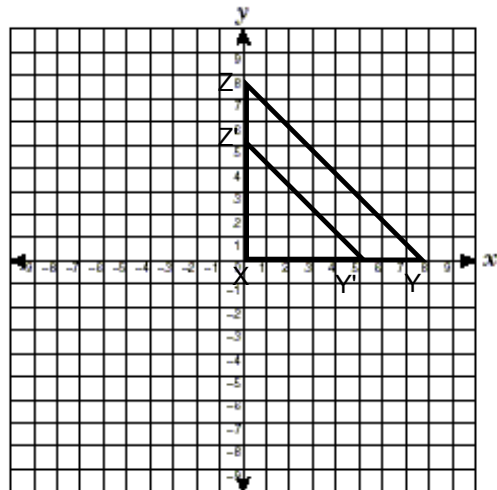


To map a geometric figure onto another using a dilation, there are two things you need to identify:

Center of Dilation: _____

Scale Factor: _____

A _____ with a scale factor of _____ centered at _____ maps _____ onto _____

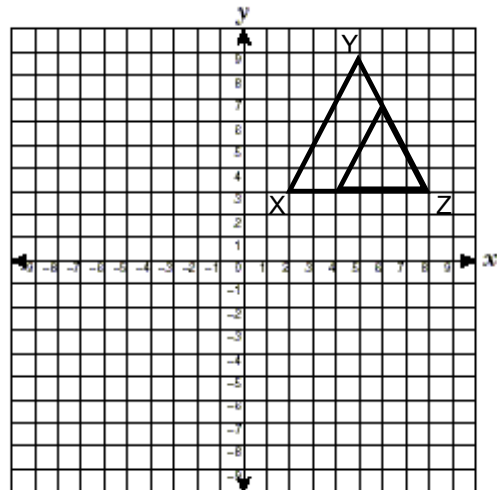


Describe a sequence of transformations that maps $\triangle XYZ$ onto $\triangle X'Y'Z'$.

Center of Dilation: _____

Scale Factor: _____

A _____ with a scale factor of _____ centered at _____ maps _____ onto _____



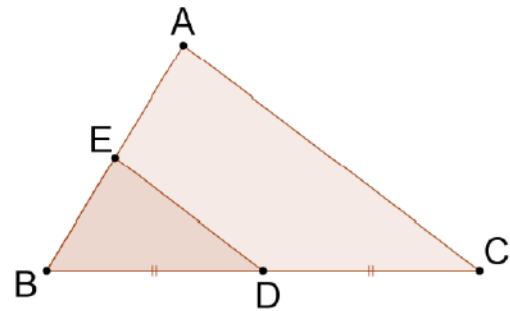
$\triangle DBE \sim \triangle XZY$. Describe a sequence of transformations that maps $\triangle DBE$ onto $\triangle XZY$.

Center of Dilation: _____

Scale Factor: _____

Dilations without the Coordinate Plane

Describe a sequence of transformations that maps $\triangle BED$ onto $\triangle BAC$

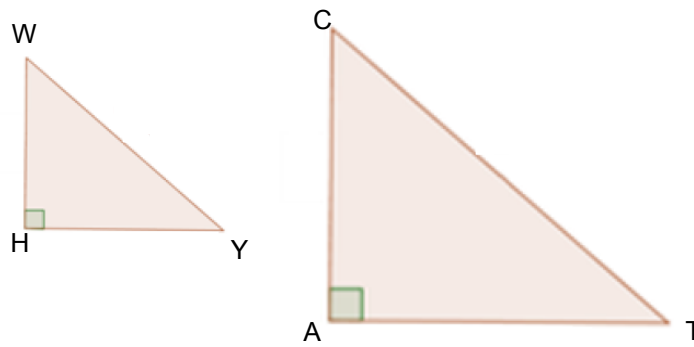


Center of Dilation: _____

Scale Factor: _____

A _____ with a scale factor of _____ centered at _____ maps _____ onto _____

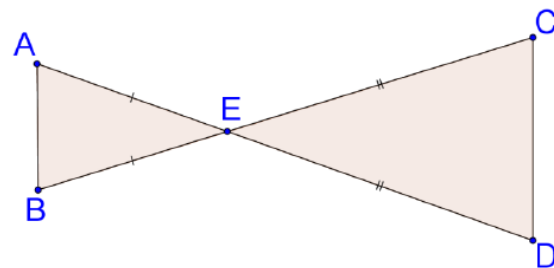
Describe a sequence of transformations that maps $\triangle WHY$ onto $\triangle CAT$



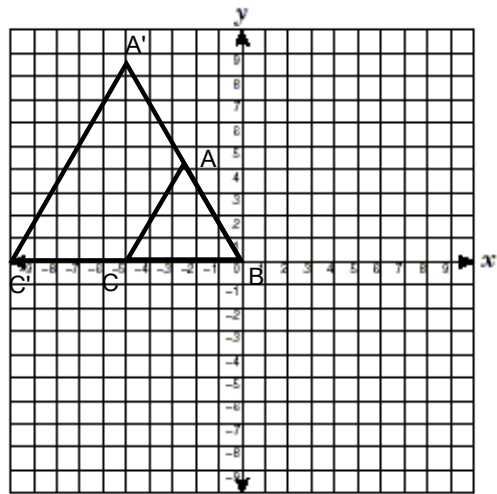
Center of Dilation: _____

Scale Factor: _____

Describe a sequence of transformations that maps $\triangle AEB$ onto $\triangle CED$



Independent Practice



Describe a transformation that maps $\triangle ABC$

onto $\triangle A'B'C'$.

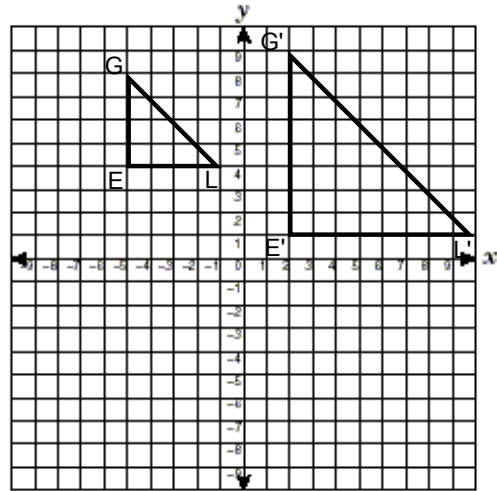
Center of Dilation: _____

Scale Factor: _____

A _____ with a scale factor of

_____ centered at _____ maps

_____ onto _____



Describe a sequence of transformations that

maps $\triangle GEL$ onto $\triangle G'E'L'$.

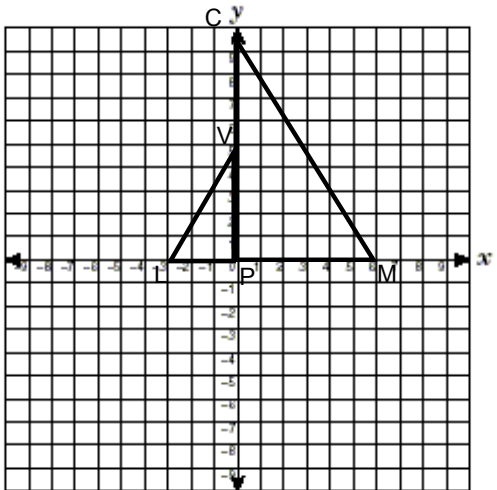
Center of Dilation: _____

Scale Factor: _____

A _____ with a scale factor of

_____ centered at _____ maps

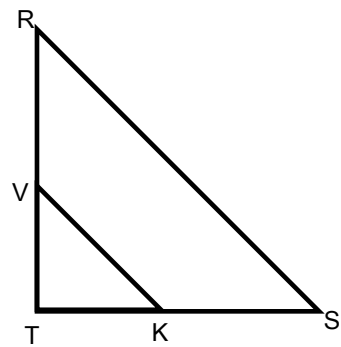
_____ onto _____



Describe a sequence of transformations that

maps $\triangle CMP$ onto $\triangle VAP$.

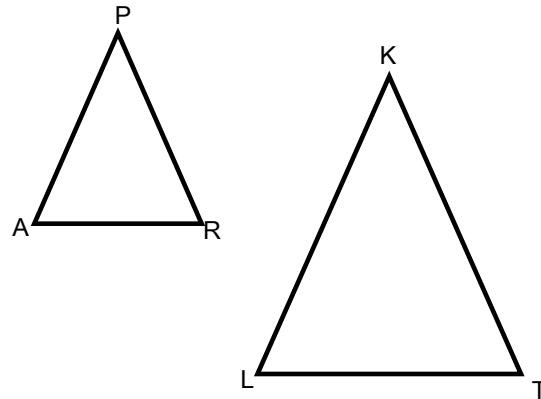
Describe a sequence of transformations that maps $\triangle VTK$ onto $\triangle RTS$.



Center of Dilation: _____
Scale Factor: _____

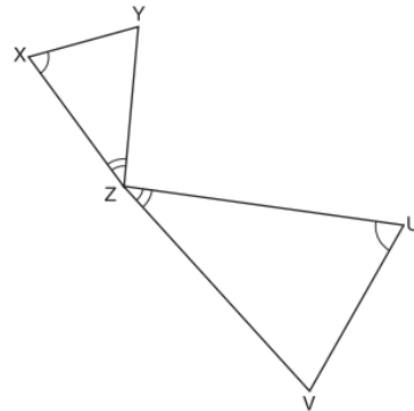
A _____ with a scale factor of _____ centered at _____ maps _____ onto _____

Describe a sequence of similarity transformations that maps $\triangle PAR$ onto $\triangle KLT$.



Center of Dilation: _____
Scale Factor: _____

In the diagram below, triangles XYZ and UVZ are drawn such that $\angle X \cong \angle U$ and $\angle XZY \cong \angle UZV$.



Describe a sequence of similarity transformations that maps triangle XYZ onto triangle UVX