Geometry

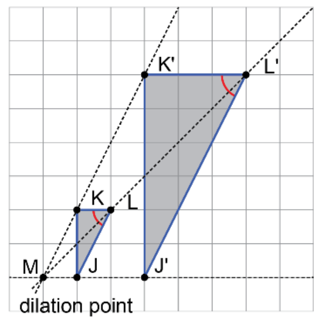
Activity 6 Assessment
Dilating 2-D Shapes

Dilating 2-D Shapes

Understands the concept of dilation

A dilation is a transformation that enlarges or reduces a shape by a scale factor. The image is not congruent.

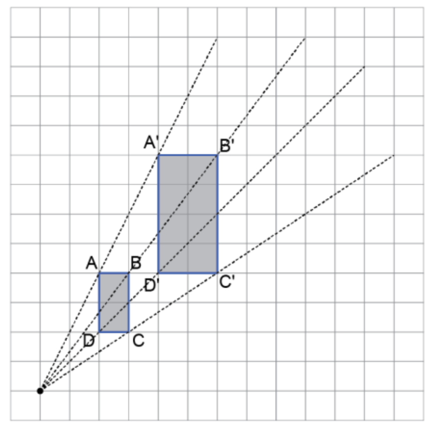
Describes the similarity between a dilated image and its original shape



I used a protractor to find that corresponding angles, like ∠L and ∠L', are equal. I counted grid units of corresponding bases and heights to find the same ratio. For example, $\frac{K'L'}{KL}$ is 3.

Describes and performs dilations on a grid

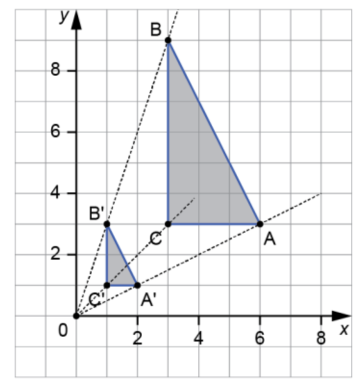
Dilate rectangle ABCD by a scale factor of 2.



I drew a line from the dilation point to vertex A. Then, I extended the length of line to 2 times that length and placed the vertex A'. I repeated the process to get rectangle A'B'C'D'.

Describes and performs dilations on a coordinate grid (first quadrant)

Dilate ΔABC by a scale factor of $\frac{1}{3}$.



I drew a line from the dilation point to vertex A. Then, divided the length of line by 3 and placed the vertex A'. I repeated the process to get ΔA'B'C'. I noticed that the coordinates of the vertices of the dilated image were one third those of the original triangle. For example, A(6, 3) moves to A'(2, 1).

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Observations/Documentation			