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## Similar Triangles on the Coordinate Plane

1. Triangle $X Y Z$ is the image that resulted from the dilation of $\triangle A B C$.

a. Use the SSS Similarity Theorem to determine whether $\triangle X Y Z$ is similar to $\triangle A B C$.
b. What scale factor was used?
c. Is the dilation an enlargement or reduction? Explain your reasoning.
2. Dilate $\triangle J K L$ shown using a scale factor of $\frac{1}{2}$ and the origin as the center of dilation to form $\triangle R S T$.
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a. What are the coordinates of the dilated image?
b. How did you determine the coordinates of the dilated image?
c. Is the dilation an enlargement or reduction? Explain your reasoning.
d. Use the SSS Similarity Theorem to verify $\triangle J K L$ is similar to triangle. $\triangle R S T$.
