1. Dilate $\triangle A B C$ about the origin with scale factor 2 to create $\Delta A^{\prime} B^{\prime} C^{\prime}$.

2. $\triangle A^{\prime} B^{\prime} C^{\prime}$ is a dilation of $\triangle A B C$ with center of dilation P as shown. What is the scale factor of this dilation?


## CO-C9P

3. Write a paragraph or two-column proof for the proposition. GIVEN: $\overline{T E} \| \overline{N S}, \overline{T E} \cong \overline{N S}$
PROVE: $\overline{T S} \cong \overline{N E}$

4. Are the figures below similar? Explain
why or why not and give numerical justification.
5. Given $\triangle A B C \sim \Delta S L E$. Find the values of $f$ and $g$.


In each pair below, explain why the triangles are similar. Then, complete the similarity statement. 6.

$\triangle B C D \sim \Delta$

$\triangle H A T \sim \Delta$ $\qquad$

