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## 4.3 - SIMILARITY \& TRINSFORMATIONS

Past due on: $\qquad$ Period: $\qquad$

1. Are the triangles below similar? If so, explain why and write a similarity statement. If not, explain why not.

2. Identify the pair of similar triangles by writing a similarity statement. Then explain why these triangles are similar.


Decide whether or not the figures are similar. Explain your reasoning.
3. JKON \& JKLM

4. $A B C D \& A E F G$

5. In the diagram, $T U V W \sim A B C D$
a. Find the scale factor of $T U V W$ to $A B C D$.
b. Use the scale factor to find $T W$ and $D C$.

6. Given: HAPIE ~NWYRS

Find the following measurements:
AP, EI, SN, YR

7. The red/larger triangle is a dilation of the blue/smaller triangle.
Find the values of $x$ and $y$.


Use the definition of similarity in terms of similarity transformations to determine whether the two figures are similar. Explain your reasoning. (Assume that the figure on the left is the pre-image.)
8.

10.

9.

11.


