$\qquad$
1)

Given: $\frac{L J}{J N}=\frac{M K}{K P}$, find $J N$.

3) The two polygons are similar. Solve for $x$ and $y$.
2) The quadrilaterals below are similar. Write the similarity statement and scale factor.

4. Complete the similarity statement for the similar triangles below. Explain why the triangles are similar. $\Delta G W K \sim \Delta$ $\qquad$


Is it possible to prove the triangles similar? Circle "yes" or "no" to answer. Explain your reasoning.
5) Yes or No

6) Yes or No

8) Yes or No

9) Yes or No


10) Yes or No

11) There are triangles below that are similar. Find the value of the variable.

12) Solve for $x$

13) $\triangle Y T K \sim \triangle N M G$. Determine the length of $\overline{G N}$.

14) Use the given information to determine whether $\overline{B C} \| \overline{D E}$. Justify your answer.

15) Solve for $A G$ and $E D$.


Solve for the variable.
16)



Each of the following is a dilation from figure P to figure P '. Give the scale factor of the dilation. 18) scale factor: $\qquad$

19) scale factor: $\qquad$

20) The diagram is a dilation. Find $x$ and $y$.

21) Draw a dilation of the polygon with the given vertices using the scale factor $\mathrm{k}=2$.


