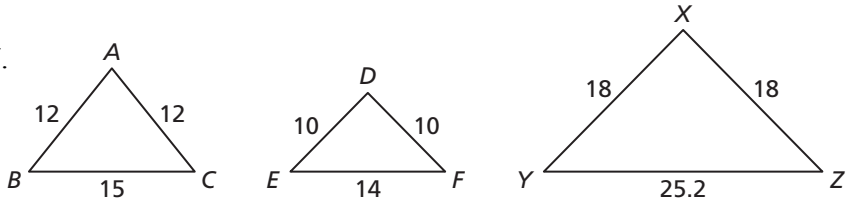
Name _____ Date _____

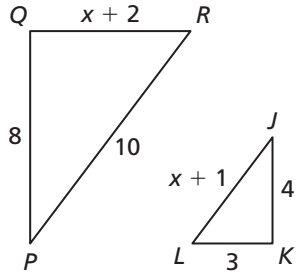
8.5 Practice A

1. Determine whether $\triangle ABC$ or $\triangle DEF$ is similar to $\triangle XYZ$.

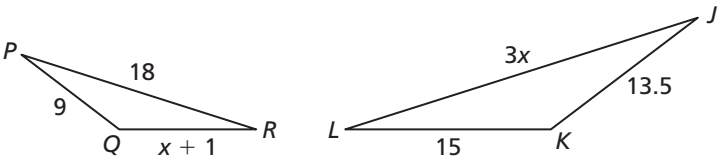


In Exercises 2 and 3, find the value of *x* that makes $\triangle PQR \sim \triangle JKL$.

2.



3.

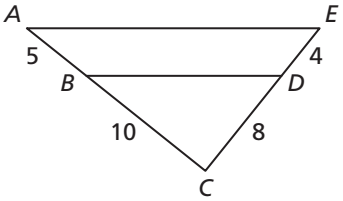


4. Verify that $\triangle TUV \sim \triangle XYZ$. Find the scale factor of $\triangle TUV$ to $\triangle XYZ$.

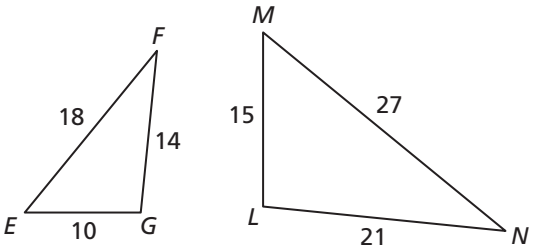
$\triangle TUV$: $TU = 15$, $UV = 21$, $TV = 18$ $\qquad$ $\triangle XYZ$: $XY = 35$, $YZ = 49$, $XZ = 42$

In Exercises 5 and 6, show that the triangles are similar and write a similarity statement. Explain your reasoning.

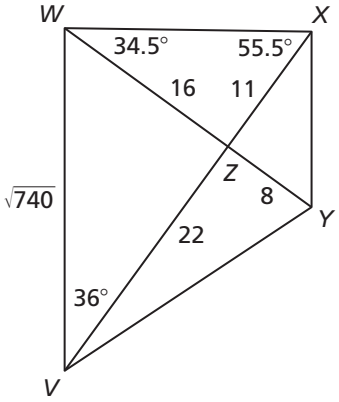
5.



6.



In Exercises 7–11, use the diagram to copy and complete the statement.



7. $\triangle VWZ \sim$ ____ **8.** $m\angle VZY =$ ____

9. $m\angle VWY =$ ____ **10.** $m\angle WXY =$ ____

11. $XY =$ ____

12. In the figure for Exercises 7–11, is $\triangle WXZ \sim \triangle YVZ$? Explain your reasoning.

13. Use the figure to write a two-column proof.

Given $\dfrac{PR}{QR} = \dfrac{TR}{SR}$ $\qquad$ **Prove** $\overline{QS} \parallel \overline{PT}$