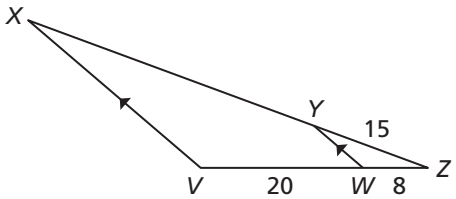
Name _____ Date _____

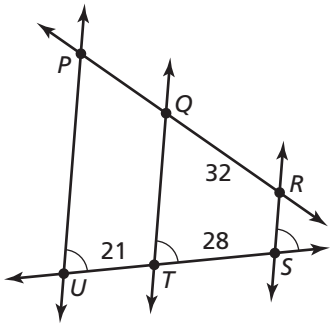
8.6 Practice B

In Exercises 1 and 2, find the length of the indicated line segment.

1. $\overline{XY}$

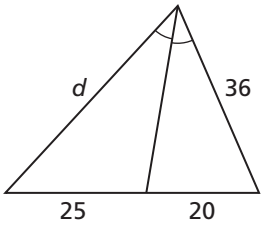


2. $\overline{PR}$

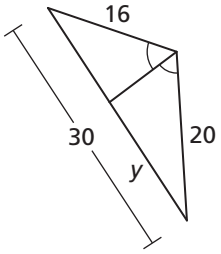


In Exercises 3 and 4, find the value of the variable.

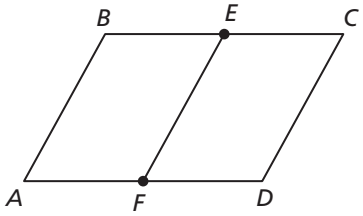
3.



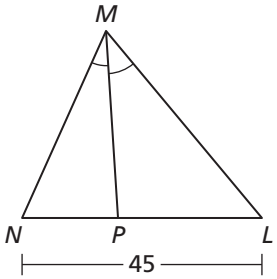
4.



5. The figure shows parallelogram $ABCD$, where E and F are the midpoints of $\overline{BC}$ and $\overline{AD}$ respectively. Your friend claims that $\overline{EF}$ is parallel to $\overline{AB}$ and $\overline{CD}$ by the Three Parallel Lines Theorem. Is your friend correct? Explain your reasoning.



6. The figure shows a triangle such that the length of $\overline{LP}$ is nine less than twice the length of $\overline{PN}$. Do you have enough information to find LP and PN? Explain your reasoning. If so, find LP and PN.



7. Use the diagram to write a two-column proof.

Given $\overline{WY}$ bisects $\angle XYZ$.
$\overline{YW}$ bisects $\angle XWZ$.
$YZ \cong WZ$

Prove $WXYZ$ is a kite.