8.4

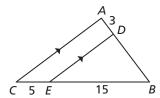
Practice A

In Exercises 1 and 2, find the length of \overline{AB} .

1.

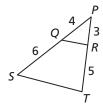


2.

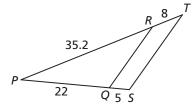


In Exercises 3 and 4, determine whether $\overline{QR} \parallel \overline{ST}$.

3.

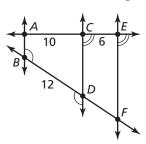


4

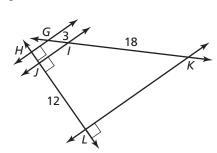


In Exercises 5 and 6, find the length of the indicated line segment.

5. \overline{DF}

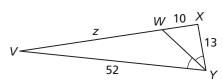


6. \overline{HJ}

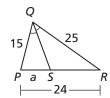


In Exercises 7 and 8, find the value of the variable.

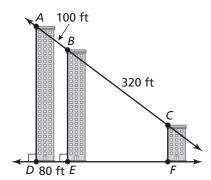
7.



8.



9. The diagram shows the skyline of a city. Find the distance between point E and point F for which $\overline{BE} \parallel \overline{CF}$. Explain your reasoning.

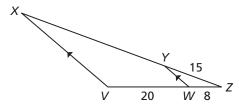


8.4

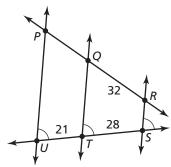
Practice B

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

1. \overline{XY}

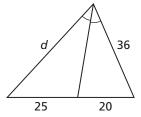


2. \overline{PR}

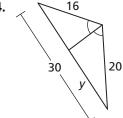


In Exercises 3 and 4, find the value of the variable.

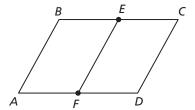
3.



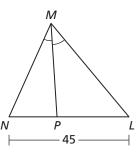
4.



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 (Theorem 8.8). 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.

