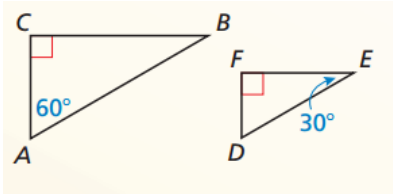


Chapter 8 Group Review

1. Two similar triangles have a ratio of $\frac{3}{5}$. If the altitude of the larger triangle is 24 inches, what is the altitude of the smaller triangle?
2. Two similar triangles have a pair of corresponding sides of length 12 meters and 8 meters. The larger triangle has a perimeter of 48 meters and an area of 180 square meters. Find the perimeter and area of the smaller triangle.

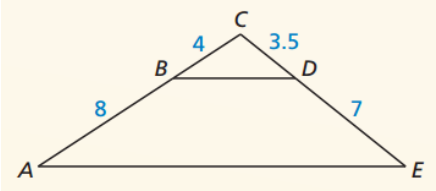
3. Write a two-column proof.
Given: $m\angle C = m\angle F = 90^\circ$, $m\angle A = 60^\circ$ and $m\angle E = 30^\circ$
Prove: $\triangle ABC \sim \triangle DEF$



Statements	Reasons

4. A cellular telephone tower casts a shadow that is 72 feet long, while nearby a tree that is 27 feet tall casts a shadow that is 6 feet long. How tall is the tower?

5. Write a two-column proof.
Given: the diagram
Prove: $\triangle CBD \sim \triangle CAE$

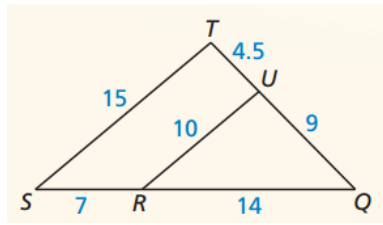


Statements	Reasons

6. Write a two-column proof.

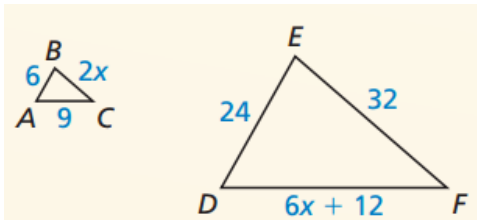
Given: the diagram

Prove: $\triangle QUR \sim \triangle QTS$

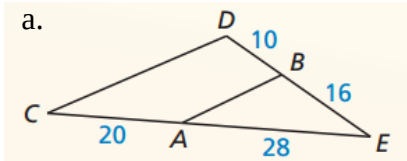


Statements	Reasons

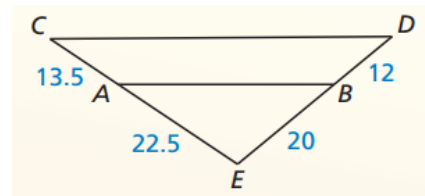
7. Find the value of x that makes $\triangle ABC \sim \triangle DEF$



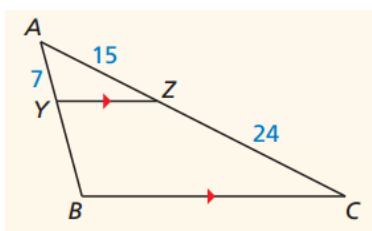
8. Decide whether $\overline{AB} \parallel \overline{CD}$. Briefly explain your answer.



- b.

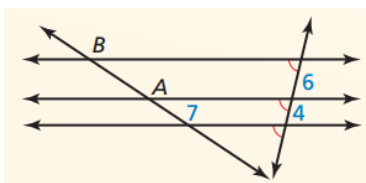


9. Find YB. Then find AB.



10. Find AB.

- a.



- b.

