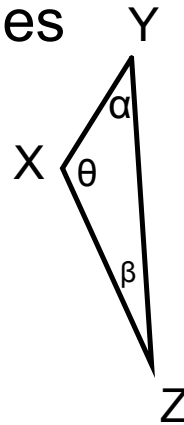
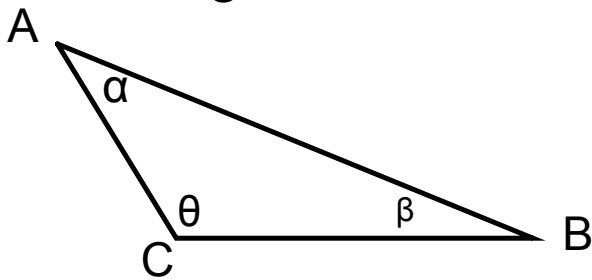


Similar Triangles: Given Angles



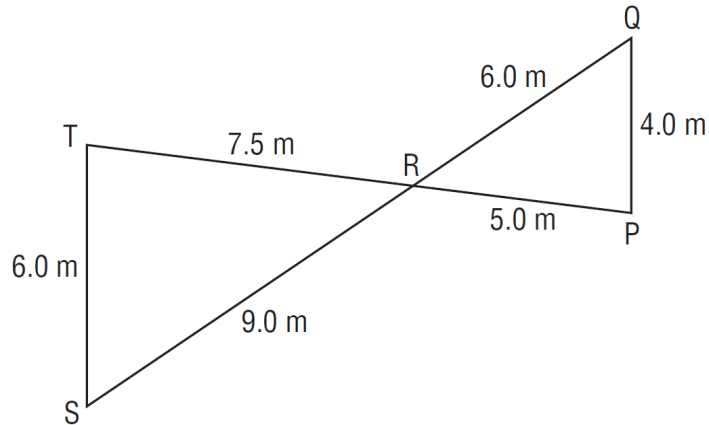
1. Write the equal angles.

2. Write the corresponding side ratios.

3. Write the similarity statement.

$\triangle ABC \sim$
similarity symbol

Similar Triangles: Given Side Lengths



1. For each triangle list the sides from longest to shortest.

2. Write and calculate the corresponding side ratios.

3. Write the similarity statement.

$$\triangle STR \sim$$

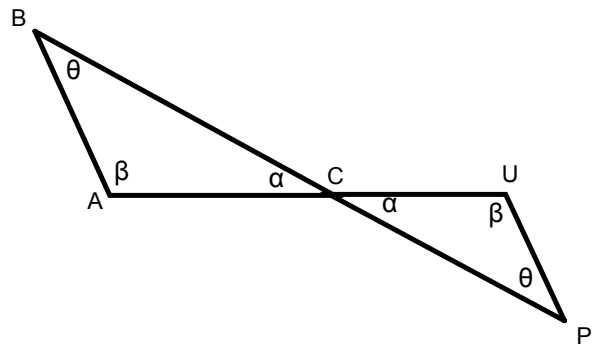
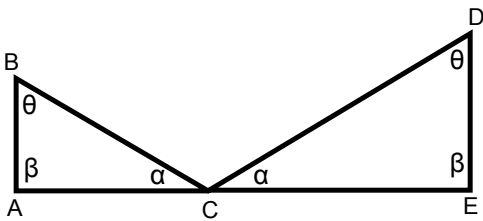
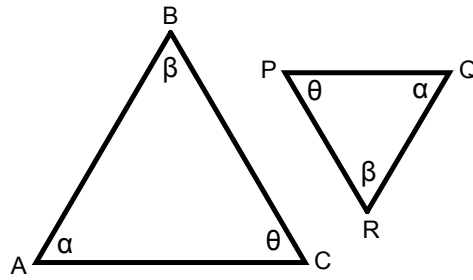
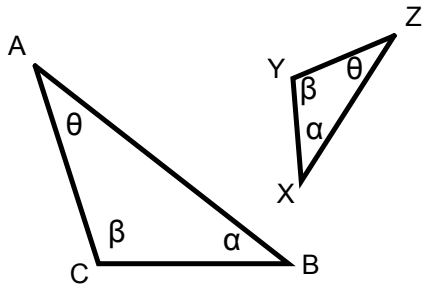
4. Write the equal angles.

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Similar Triangles Practice: Given Equal Angles

For each pair of triangles:

1. Write the equal angles.
2. Write the corresponding side ratios.
3. Complete the similarity statement for each: $\triangle ABC \sim$

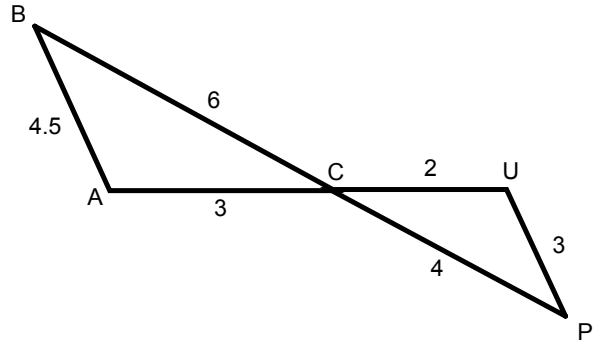
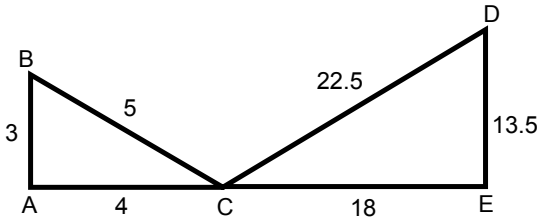
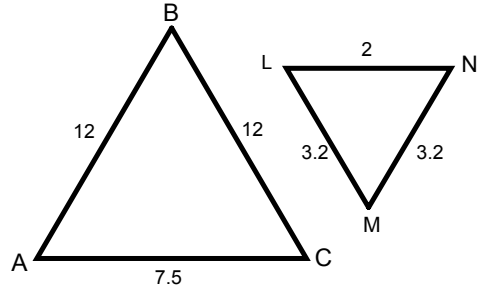
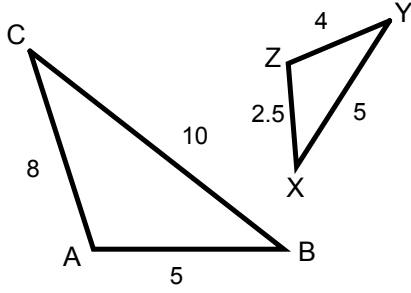


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Similar Triangles Practice: Given Side Lengths

For each pair of triangles:

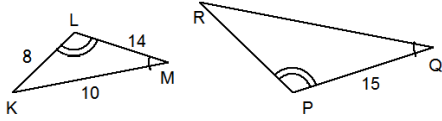
1. List the sides from longest to shortest.
2. Write and calculate the corresponding side ratios.
3. Complete the similarity statement for each: $\triangle ABC \sim$
4. Write the equal angles.



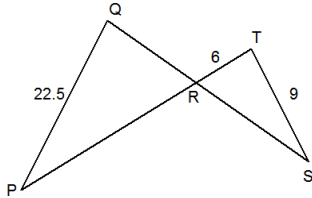
Practice Problems

For each question write the similarity statement, corresponding side ratios, and then solve for the unknown side.

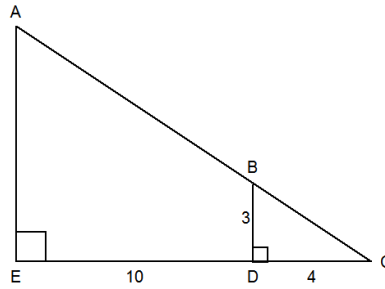
These triangles are similar. Determine the length of QR to the nearest tenth.



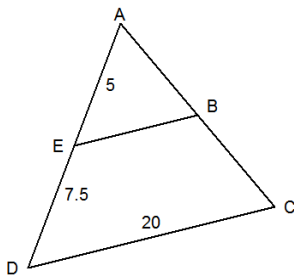
Determine the length of QR in these similar triangles.



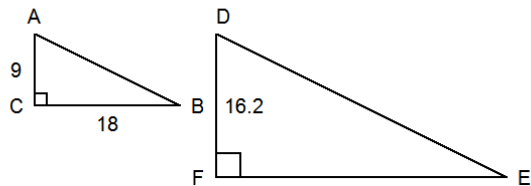
Determine the length of AE in this pair of similar triangles.



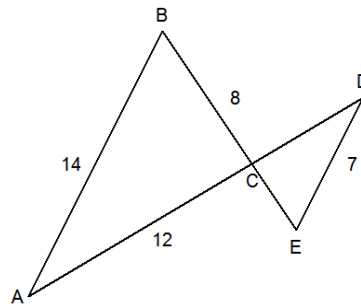
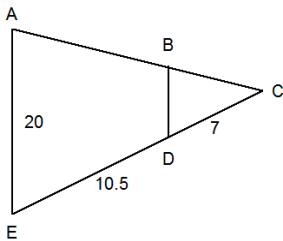
Determine the length of EB in this pair of similar triangles.



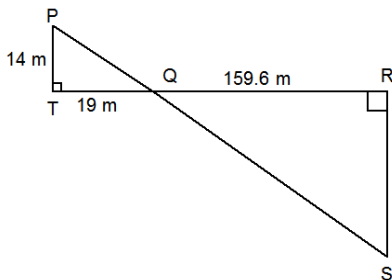
Determine the length of EF in these similar triangles.



Determine the length of BD in these similar triangles. Determine the lengths of CD and CE in these similar triangles.



Determine the length of RS in these similar triangles.



When the shadow of a flagpole is 31.2 m long, a 1.6-m fencepost casts a shadow 2.6 m long. How tall is the flagpole?