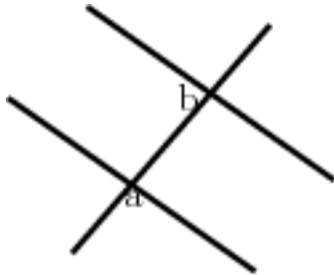


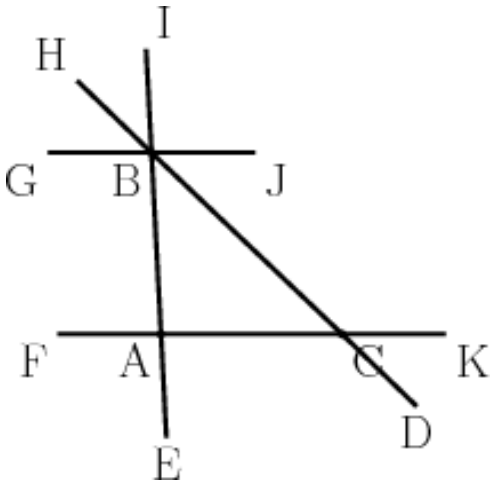
Name _____

Date _____

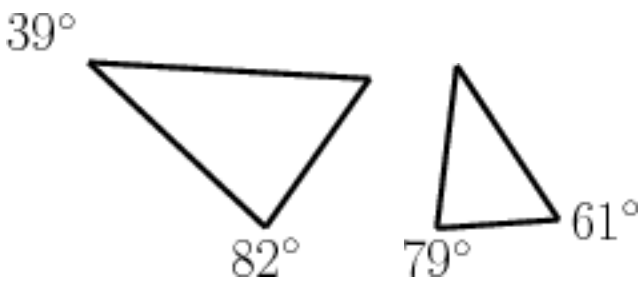
1. What is the relationship between this pair of angles (equivalent or supplementary)? Give a reason.



2. $\angle FAE$ measures 93° . $\angle ABC$ measures 43° . Find the measure of $\angle BCA$. Explain how you found the measurement.

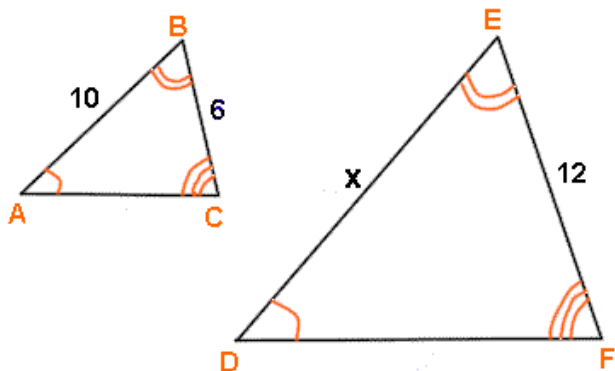


3. Are the two triangles similar? Explain.

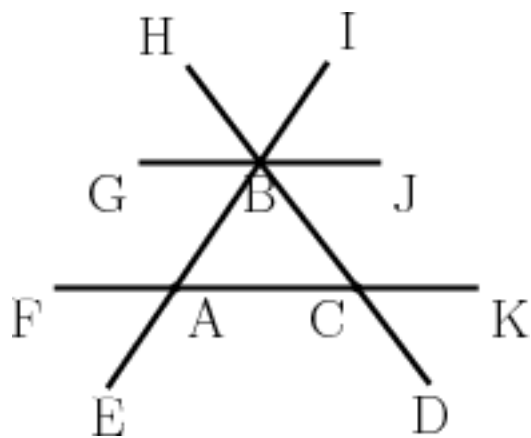


4. Find the scale factor of enlargement. Then find x .

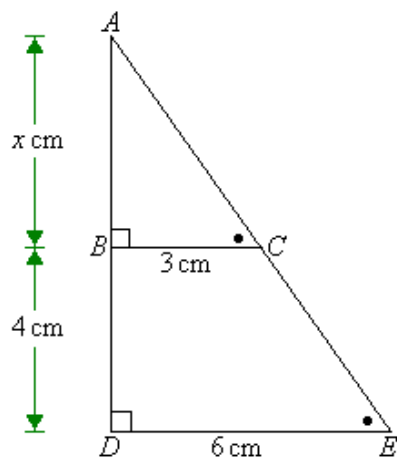
Find x :



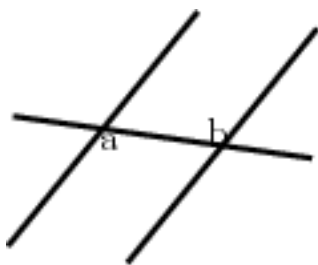
5. $\angle ACB$ measures 53° . $\angle ABC$ measures 71° . Find the measure of $\angle CAE$. Explain how you found the measurement.



6. Are the triangles similar? Find the scale factor of enlargement. Then find x .



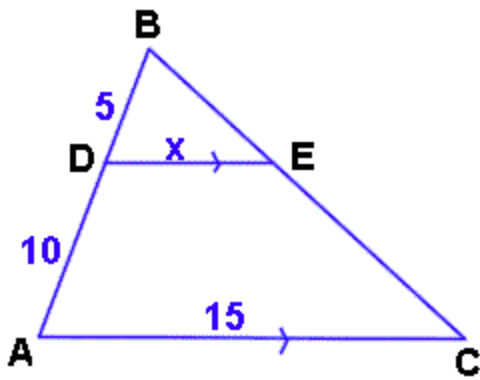
7. What is the relationship between this pair of angles (congruent or supplementary)? Give a reason.



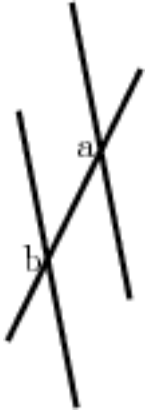
8. What is the measure of each unlabeled angle as an algebraic expression in relation to x ?



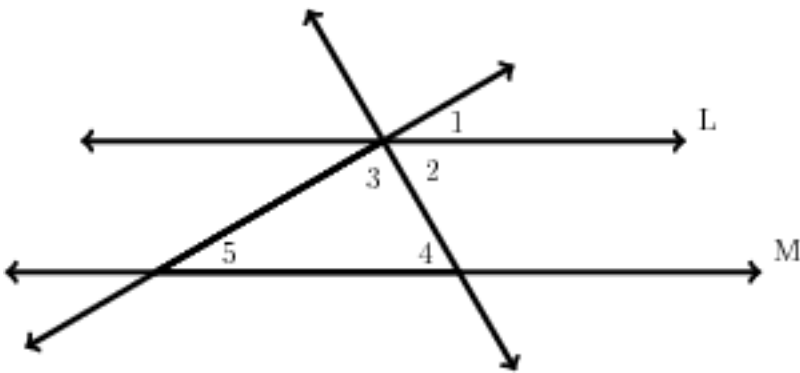
9. Explain whether the triangles are similar. Find the scale factor of enlargement. Then find x .



10. What is the relationship between this pair of angles (equivalent or supplementary)? Give a reason.



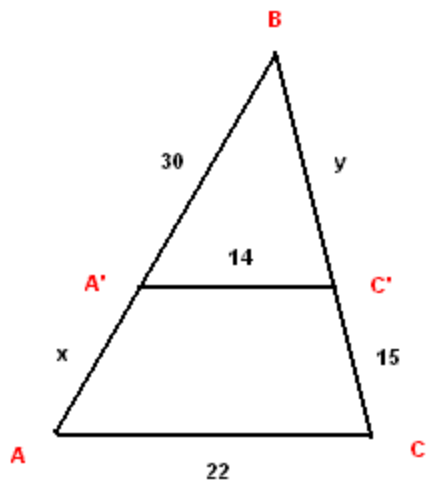
11. Line L and Line M are parallel. Show that $m\angle 3 + m\angle 4 + m\angle 5 = 180^\circ$.



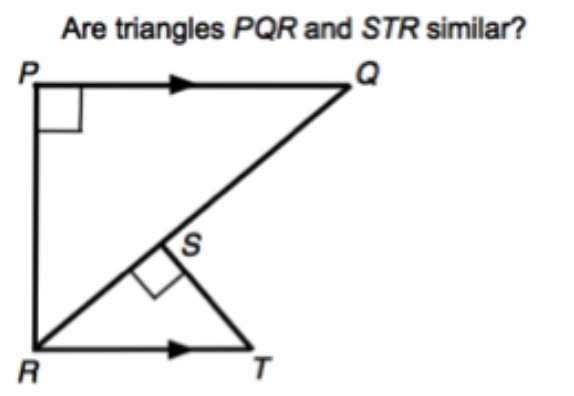
Lines AC and A'C' are parallel.

12. Lines AC and A'C' are parallel. Explain if the triangles are similar or not.

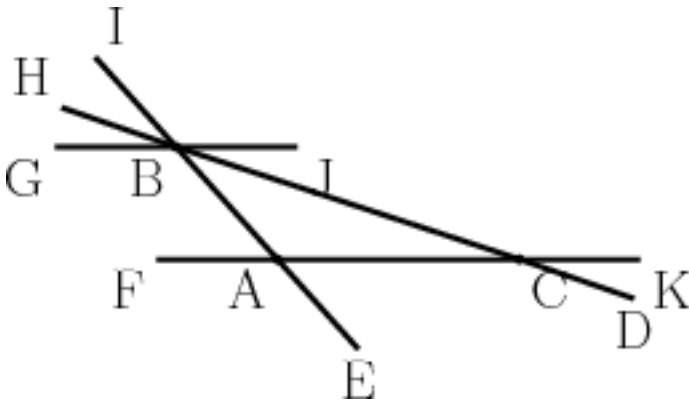
Find the scale factor of enlargement. Then find x. Round to the nearest tenths.



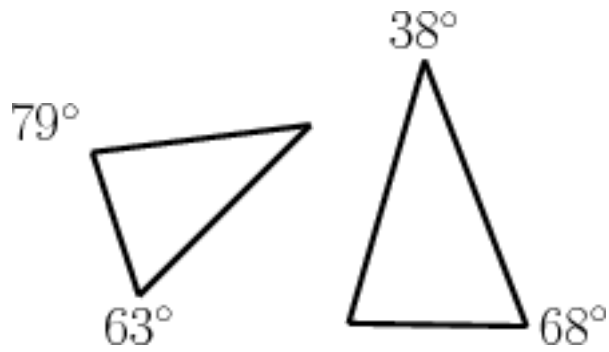
13. Explain whether or not the two triangles are similar.



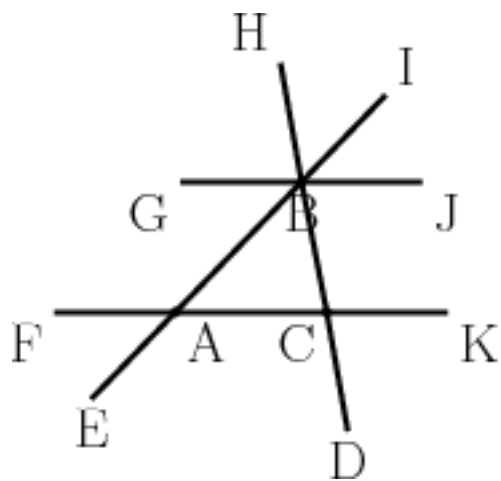
14. $\angle BAC$ measures 132° . $\angle ACB$ measures 19° . Find the measure of $\angle CBI$. Explain how you found the measurement.



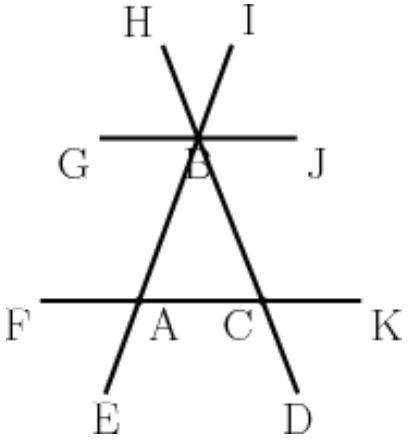
15. Are the two triangles similar? Explain.



16. $\angle BAC$ measures 46° . $\angle ACB$ measures 80° . Find the measure of $\angle ABH$. Explain how you found the measurement.

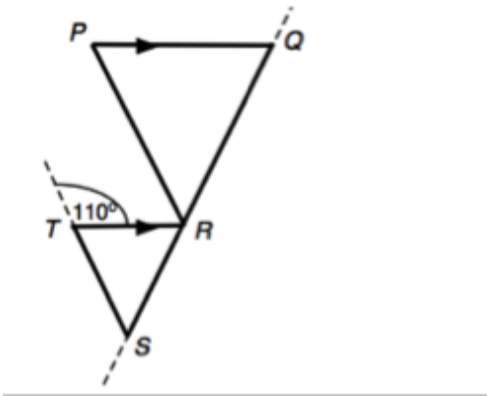


17. $\angle ACB$ measures 69° . $\angle ABC$ measures 41° . Find the measure of $\angle CAE$.



14. Explain how you know if the two triangles below or similar or not.

Are triangles PQR and TRS similar?



15. In triangle $\triangle ABC$, point M is the point of intersection of the bisectors of angles $\angle BAC$, $\angle ABC$, and $\angle ACB$. The measure of $\angle ABC$ is 42° , and the measure of $\angle BAC$ is 64° . What is the measure of $\angle BMC$?

