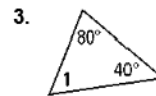
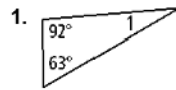
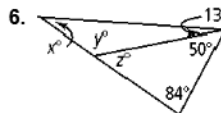
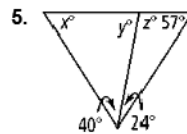
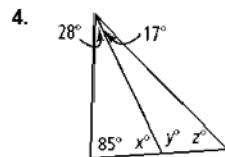


Find  $m\angle 1$ .

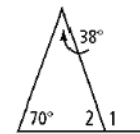


**Algebra** Find the value of each variable.

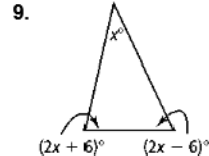
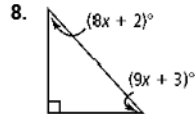


7. Use the diagram at the right to answer the questions.

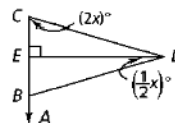
- Which angle is an exterior angle?
- What are its remote interior angles?
- Find  $m\angle 1$  and  $m\angle 2$ .



Find the value of the variables and the measures of the angles.



10. In the figure at the right,  $\overline{ED} \perp \overline{CB}$  and  $\overline{ED}$  bisects  $\angle CDB$ . Find  $m\angle DBA$ .



**11. Think About a Plan** The measure of an exterior angle of  $\triangle DEF$  is  $4x$ . The measure of one of this angle's remote interior angles is  $x + 23$ . The measure of the other remote interior angle is  $2x + 12$ . Find the value of  $x$ , the measure of each angle of the triangle, and the measure of the exterior angle.

- How can drawing a picture help you find the answers?
- How are the exterior angle and the third angle of the triangle related?