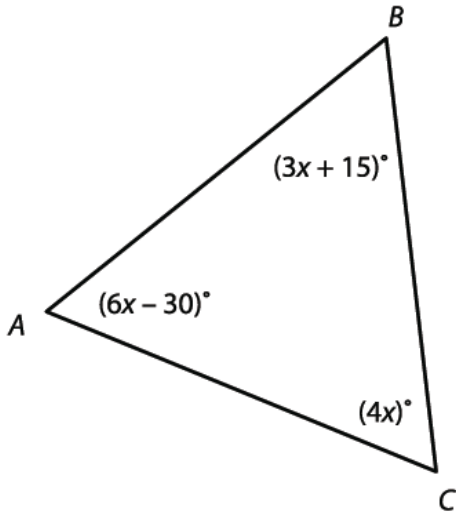
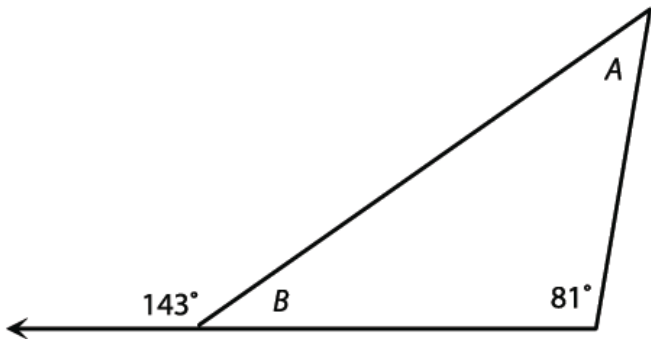


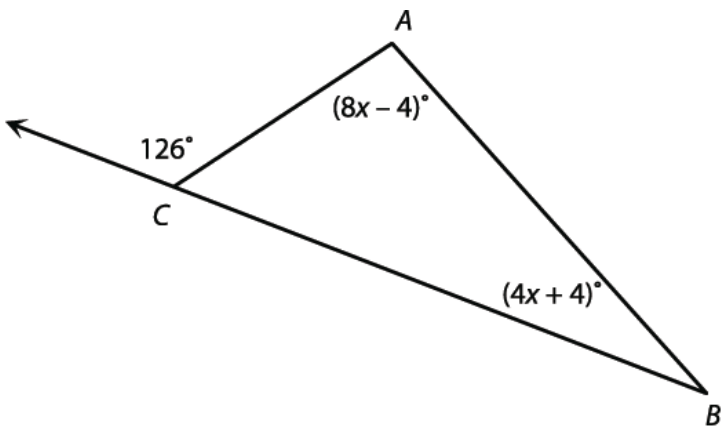
1. Find the measure of  $\angle C$ . Justify your work.



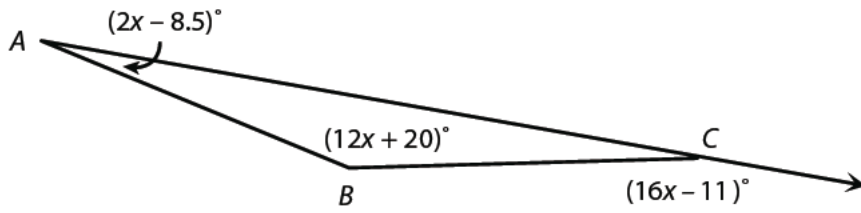
2. Find the measure of  $\angle A$  and  $\angle B$ . Justify your work.



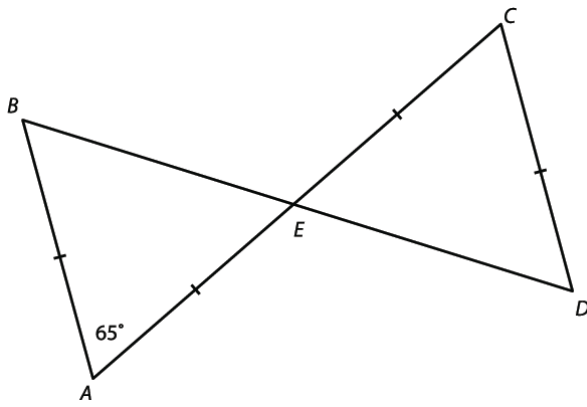
3. Find the measure of  $\angle CAB$  and  $\angle ABC$ . Justify your work.



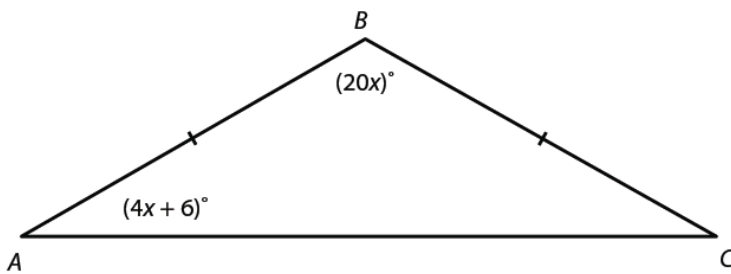
4. Find  $m\angle CAB$  and  $m\angle ABC$ . Justify your work.



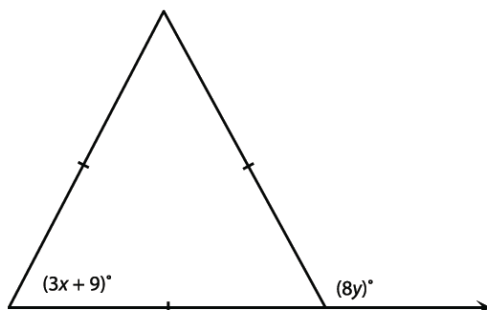
5. Find  $m\angle B$ ,  $m\angle C$ , and  $m\angle D$ . Justify your work.



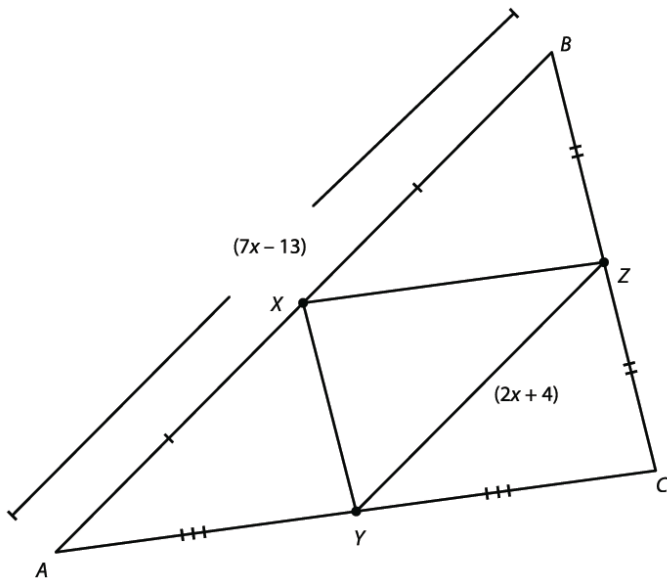
6. Find  $m\angle A$ ,  $m\angle B$ , and  $m\angle C$ . Justify your work.



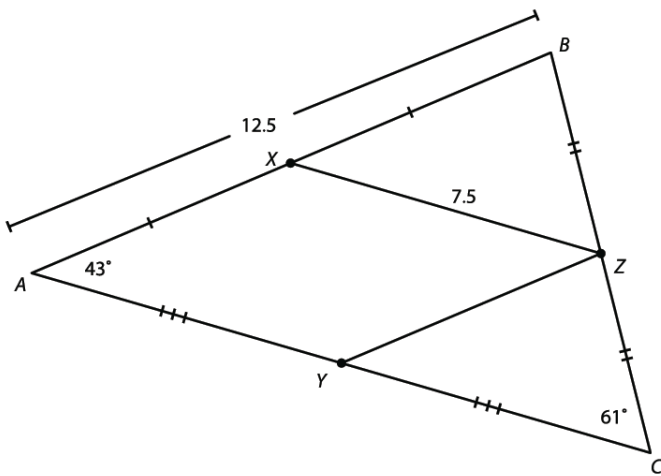
7. Find  $x$  and  $y$ . Justify your work.



8. What is the length of YZ? Justify your work.



9. Find the measure of  $AC$  and  $YZ$  and the measure of  $\angle XZY$ . Justify your work.



10. Verify that the centroid,  $(-3, 3)$ , of  $\triangle ABC$  with vertices  $A(6, 9)$ ,  $B(0, 0)$  and  $C(-15, 0)$  is  $\frac{2}{3}$  the distance from each vertex to the midpoint of the opposite side.