For each piece of given information below, mark the diagram with all additional information that can be known as a result of the given. When requested, solve for the value of the variable in the expressions provided. Repeat the steps listed in #1 for each of the problems on this assignment.
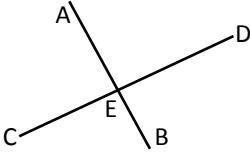
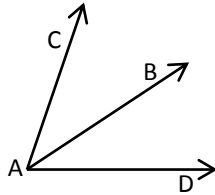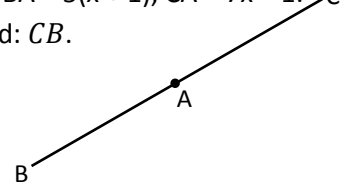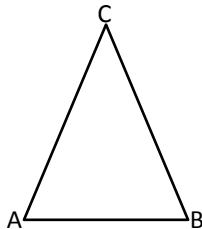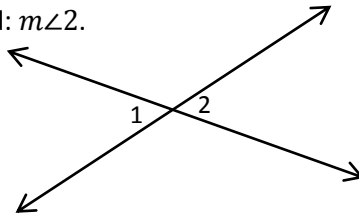|		
1. Given: $\angle AED$ is a right angle. $m\angle AEC = 5x + 25$. Find x. Step 1: Mark the information on the diagram above. Step 2: Think about what the information tells you or how it could be used to write an equation. Step 3: Write and solve an equation.	2. Given: $\overrightarrow{AB}$ bisects $\angle CAD$, $m\angle CAB = 2x$, $m\angle DAB = x + 10$. Find: $m\angle CAD$.	3. Given: A is the midpoint of $\overline{BC}$ BA = 5(x + 1), CA = 7x − 1. Find: CB.
4. Given: ΔABC is isosceles with base $\overline{AB}$; $m\angle A = 5x - 14$, $m\angle B = 3x + 16$. Find: $m\angle C$.	5. Given: Diagram below; $m\angle 1 = 6x$, $m\angle 2 = 3x + 30$. Find: $m\angle 2$.	6. Given: m$\angle ABD = 58°$, $m\angle 1 = 15°$ $m\angle 2 = (5x - 42)°$. Find: $m\angle 2$.