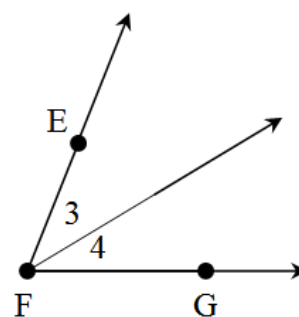
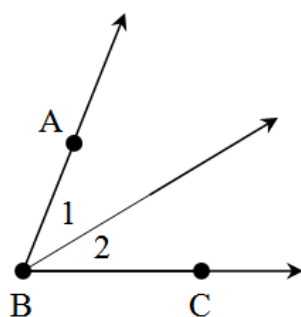


Write a paragraph proof.

1. Given:  $\angle 1 \cong \angle 3$

$\angle 2 \cong \angle 4$

Prove:  $\angle ABC \cong \angle EFG$



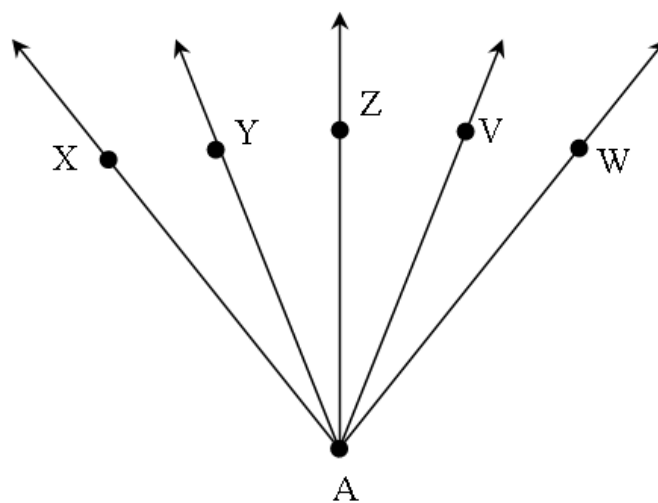
2. In the following picture,

$\overrightarrow{AZ}$  bisects  $\angle XAW$ ,

$\overrightarrow{AY}$  bisects  $\angle XAZ$ ,

$\overrightarrow{AV}$  bisects  $\angle ZAW$ ,

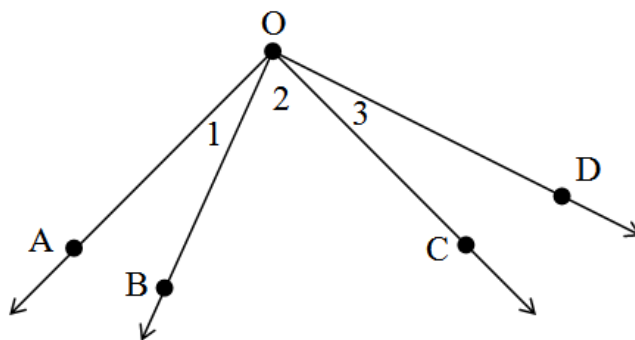
Prove that  $\angle XAY \cong \angle VAW$ .



3. Write a paragraph proof.

Given:  $m\angle AOC = 90^\circ$   
 $m\angle BOD = 90^\circ$

Prove:  $\angle 1 \cong \angle 3$



4.  $\overrightarrow{BD}$  bisects  $\angle ABC$ , if the  $m\angle ABD = 7x + 8$ ,  $m\angle DBC = 10y - 3$  and  $m\angle ABC = 13x + 3y + 5$ , find  $x$ ,  $y$ , and  $m\angle ABC$

