3.

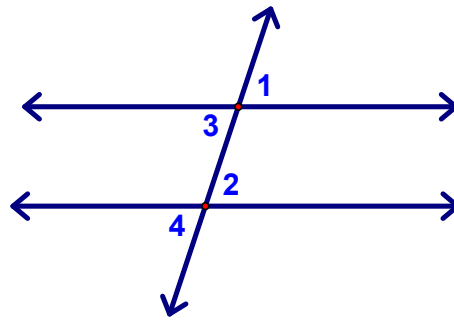**Given:** $\angle 1 \cong \angle 3$
$\angle 2 \cong \angle 3$
$\angle 2 \cong \angle 4$

Prove: $\angle 1 \cong \angle 4$
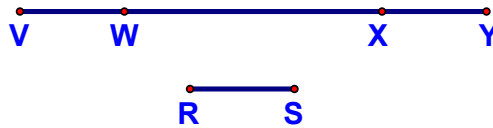
Statements	Reasons

10.

Given: $\overline{VW} \cong \overline{RS}$
$\overline{XY} \cong \overline{RS}$

Prove: $\overline{VX} \cong \overline{WY}$

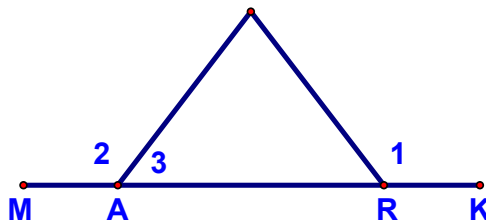| Statements	Reasons

11.

Given: ∠**1** ≅ ∠**2**

Prove: ∠**1 is supp. to** ∠**3**

2 3   1

M   A   R   K

Statements	Reasons

12.

Given: ∠**A is comp. to** ∠**ADB**
∠**C is comp. to** ∠**CDB**
$\overrightarrow{DB}$ **bisects** ∠**ADC**

Prove: ∠**A** ≅ ∠**C**

D

A   B   C
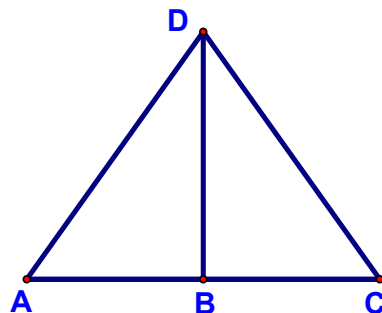
Statements	Reasons

13.

Find the measures of each of the following angles in terms of x and y.

a. ∠**HFK**

b. ∠**EFK**

c. ∠**HFG**
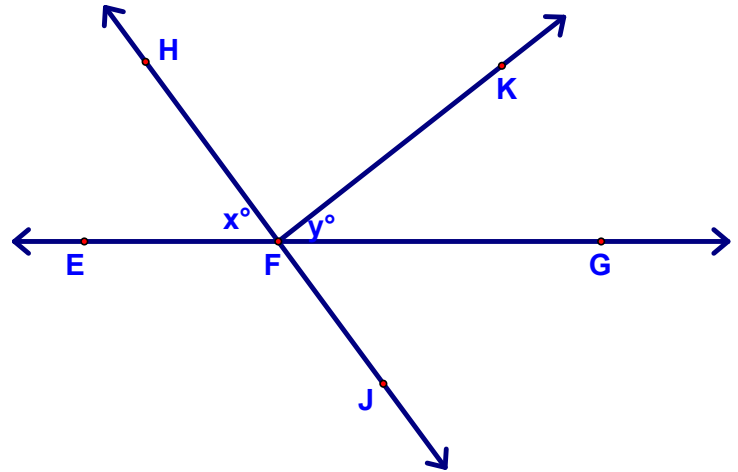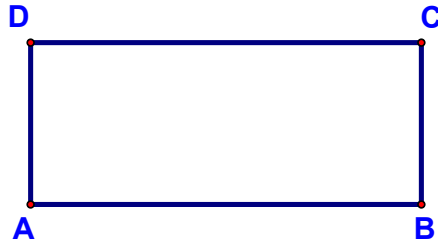
14.

When one-half the supplement of an angle is added to the complement of the angle, the sum is 120°. Find the measure of the complement.

15.

Given: ∠A is a right ∠
∠B is a right ∠
∠B ≅ ∠D

Prove: ∠A ≅ ∠D

Statements   **Reasons**