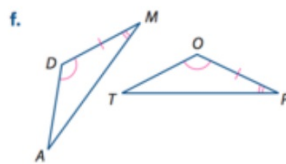
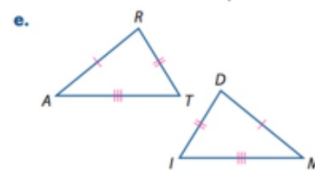
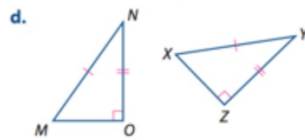
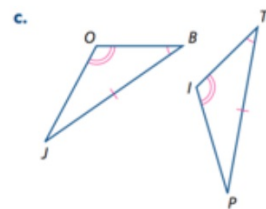
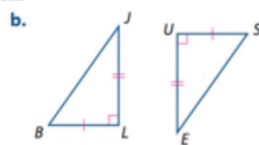
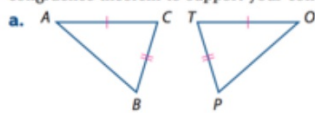


Examine each of the following pairs of triangles and their markings showing congruence of corresponding angles and sides. In each case, decide whether the information given by the markings ensures that the triangles are congruent. If the triangles are congruent, write a congruence relation showing the correspondence between vertices. Cite an appropriate congruence theorem to support your conclusion.

ASA
AAS
SSS
SAS
HL



a) None

b) $\triangle JBL \cong \triangle USE$ SAS

c) $\triangle JOB \cong \triangle TIP$ AAS

d) $\triangle MNO \cong \triangle XYZ$ HL

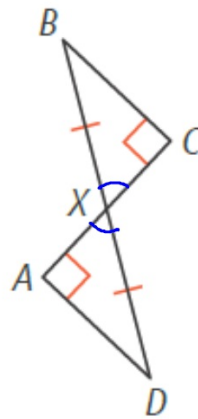
e) $\triangle RAT \cong \triangle DIM$ SSS

f) $\triangle ADM \cong \triangle TOP$ ASA

Write a proof. SEE EXAMPLE 5

Given: $\angle A \cong \angle C$, $\overline{BX} \cong \overline{DX}$

Prove: $\overline{AX} \cong \overline{CX}$



Statement	Reason
1) $\angle A \cong \angle C$ $\overline{BX} \cong \overline{DX}$	1) Given
2) $\angle AXD \cong \angle CXB$	2) Vertical \angle 's \cong
3) $\triangle AXD \cong \triangle CXB$	3) AAS
4) $\overline{AX} \cong \overline{CX}$	4) CPCTC