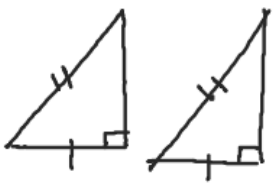
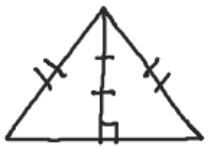
(Right △ only!)

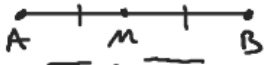
Hypotenuse-Leg (HL)

In Right △ is Hypotenuse ≅ and Corresponding Leg ≅.





Midpoint – Point that cuts a segment in half.



$\overline{AM} \cong \overline{BM}$

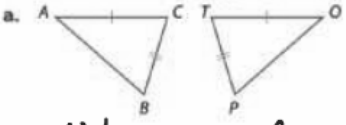
Bisector Cuts in half

Bisect Segments + Angles

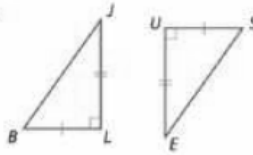
Bisector → Point line Segment

Reflexive Property

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.

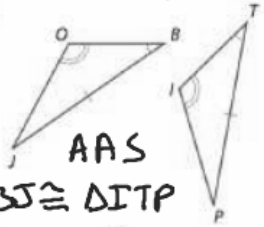
a. 

Not enough info

b. 

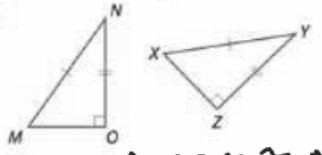
△BLJ ≅ △SUE

SAS

c. 

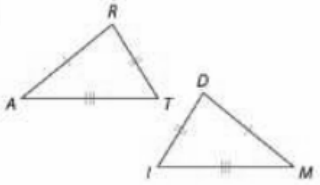
AAS

△OBJ ≅ △ITP

d. 

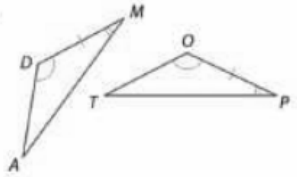
HL

△MON ≅ △XZY

e. 

△ART ≅ △MDI

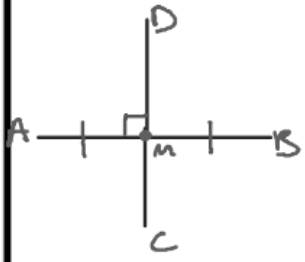
SSS

f. 

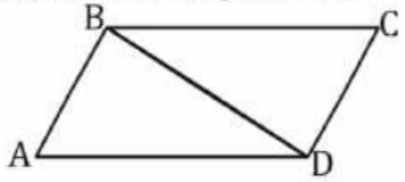
△AMD ≅ △TOP

ASA

Perpendicular Bisector

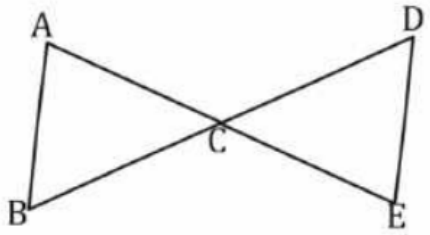


Given: $\overline{AB} \cong \overline{CD}$, $\overline{AD} \cong \overline{CB}$



Prove: $\triangle ABD \cong \triangle BCD$

Given: $\overline{AE}$ Bisects $\overline{BD}$, $\angle B \cong \angle D$



Prove: $\triangle ABC \cong \triangle DBC$