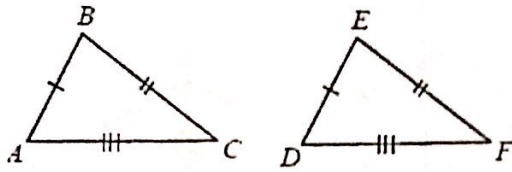


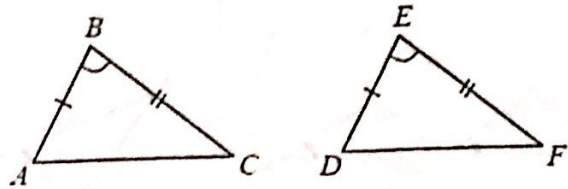
### SIDE-SIDE-SIDE (SSS)

If three sides of one triangle are congruent to three sides of another triangle, then the triangles are congruent.



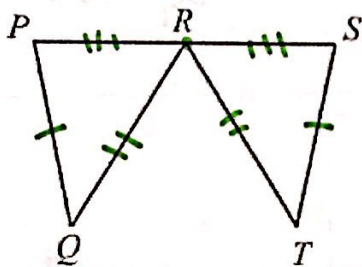
### SIDE-ANGLE-SIDE (SAS)

If two sides and the included angle of one triangle is congruent to two sides and the included angle of another triangle, then the triangles are congruent.



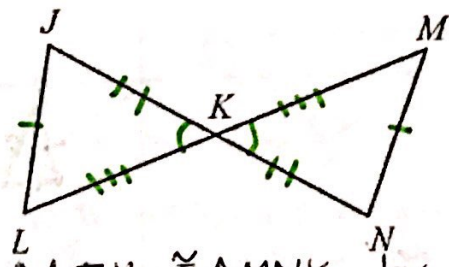
**Directions:** Label the given information on each diagram. State whether the triangles could be congruent by SSS or SAS. If so, write a congruency statement.

$\overline{PQ} \cong \overline{ST}$ ;  $\overline{QR} \cong \overline{RT}$ ;  $R$  is the midpoint of  $\overline{PS}$



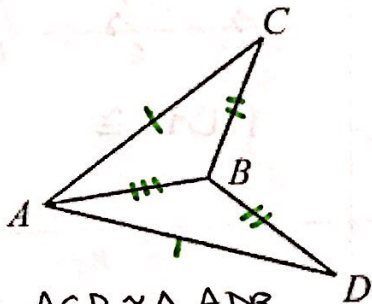
Yes  $\triangle PQR \cong \triangle STR$  by SSS

$\overline{JL} \cong \overline{MN}$ ;  $K$  is the midpoint of  $\overline{JN}$  and  $\overline{LM}$



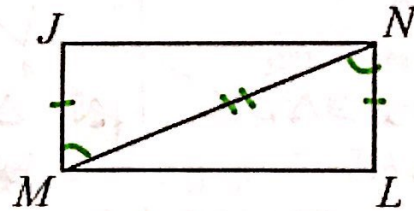
Yes  $\triangle LJK \cong \triangle MNK$  by SSS AND SAS

$\overline{AC} \cong \overline{AD}$ ;  $\overline{CB} \cong \overline{BD}$



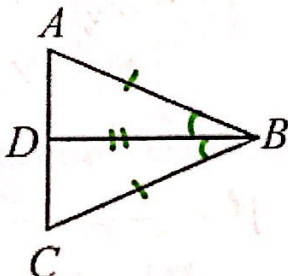
Yes  $\triangle ACB \cong \triangle ADB$  by SSS

$\overline{JM} \cong \overline{NL}$ ;  $\angle JMN \cong \angle LNM$



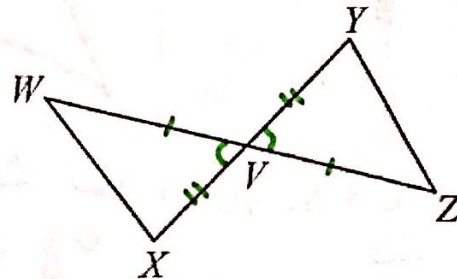
Yes,  $\triangle JMN \cong \triangle LNM$  by SAS

$\overline{AB} \cong \overline{BC}$ ;  $\overline{BD}$  bisects  $\angle ABC$



Yes,  $\triangle ABD \cong \triangle CBD$  by SAS

$V$  is the midpoint of  $\overline{WZ}$  and  $\overline{XY}$



Yes,  $\triangle WVX \cong \triangle ZVY$  by SAS

Directions: State whether the triangles could be congruent by SSS, SAS or neither. If so, write a congruency statement.

yes  $\Delta KLJ \cong \Delta MNL$   
by SAS

not  $\cong$

yes  $\Delta RPQ \cong \Delta SPQ$   
by SSS

\* $\overline{BC}$  bisects  $\angle ABD$   
yes  $\Delta ABC \cong \Delta DBC$   
by SAS

\* $\overline{AC} \cong \overline{EC}$   
and  
 $\overline{BC} \cong \overline{DC}$   
yes  $\Delta ABC \cong \Delta EDC$   
by SSS

not  $\cong$

\*C is the midpoint of  $\overline{AD}$   
yes  $\Delta ABC \cong \Delta DBC$   
by SSS

yes  $\Delta ABC \cong \Delta DCB$   
by SAS

\* $\overline{BD}$  and  $\overline{AE}$  bisect each other  
yes  $\Delta BCA \cong \Delta ECD$   
by SAS