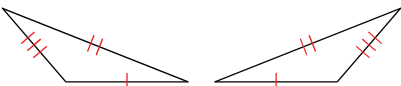


WS 4-4 & 4-5 Triangle Congruence Postulates

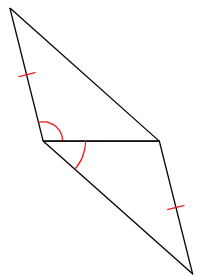
Date _____ Period _____

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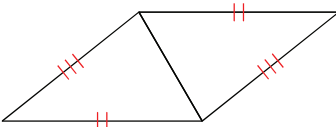
State if the two triangles are congruent. If they are, state how you know. If you assume a part congruent, mark it in color on the diagram.

1) 

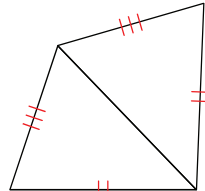
A) AAS B) ASA
C) SSS D) Not congruent

2) 

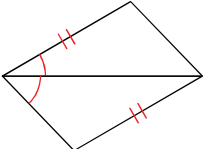
A) AAS B) ASA
C) SAS D) Not congruent

3) 

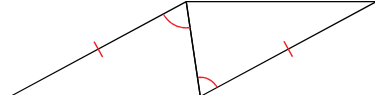
A) SAS B) Not congruent
C) AAS D) SSS

4) 

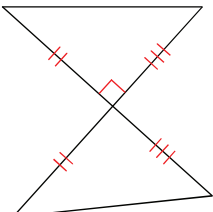
A) SSS B) SAS
C) ASA D) Not congruent

5) 

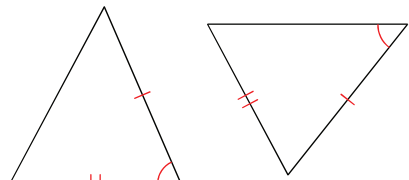
A) ASA B) SSS
C) AAS D) Not congruent

6) 

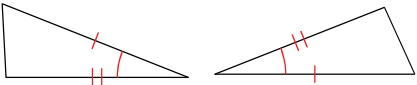
A) SAS B) ASA
C) Not congruent D) AAS

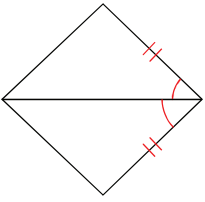
7) 

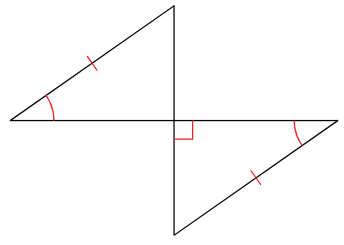
A) SAS B) AAS
C) ASA D) SSS

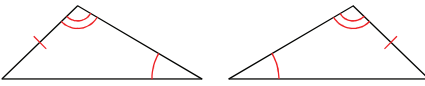
8) 

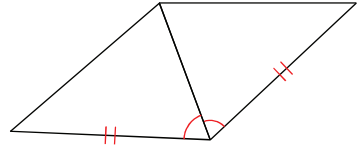
A) Not congruent B) AAS
C) ASA D) SSS

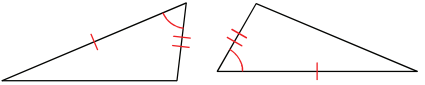
- 9)
- 
- A) Not congruent B) ASA
C) SAS D) SSS

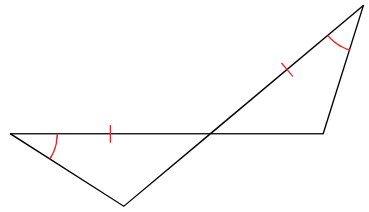
- 10)
- 
- A) SAS B) AAS
C) SSS D) Not congruent

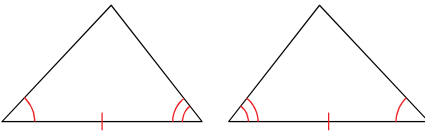
- 11)
- 
- A) ASA B) AAS
C) SSS D) Not congruent

- 12)
- 
- A) SSS B) Not congruent
C) AAS D) SAS

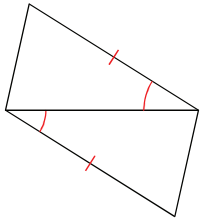
- 13)
- 
- A) ASA B) Not congruent
C) SSS D) SAS

- 14)
- 
- A) SSS B) SAS
C) AAS D) Not congruent

- 15)
- 
- A) ASA B) SAS
C) AAS D) SSS

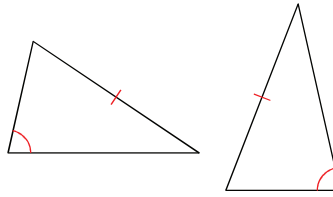
- 16)
- 
- A) AAS B) ASA
C) SSS D) Not congruent

17)



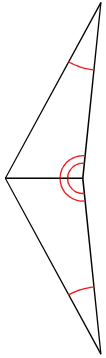
- A) SSS B) SAS
C) Not congruent D) ASA

18)



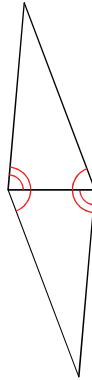
- A) ASA B) SAS
C) Not congruent D) AAS

19)



- A) Not congruent B) ASA
C) AAS D) SAS

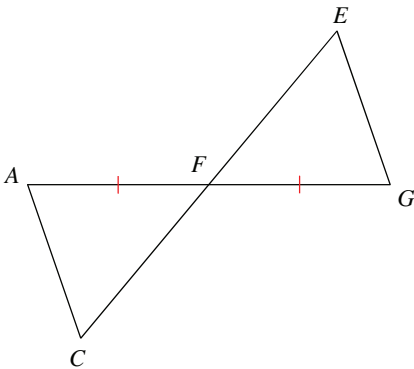
20)



- A) SSS B) Not congruent
C) ASA D) SAS

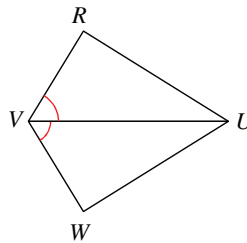
State what additional information is required in order to know that the triangles are congruent for the reason given.

21) ASA



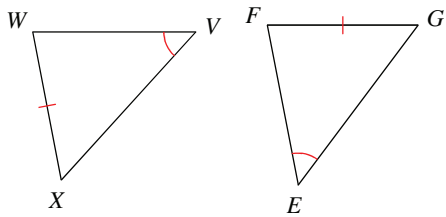
- A) $\angle G \cong \angle A$
B) $\overline{EG} \cong \overline{CA}$
C) $\angle GFE \cong \angle AFC$
D) $\overline{GF} \cong \overline{AF}$

22) SAS



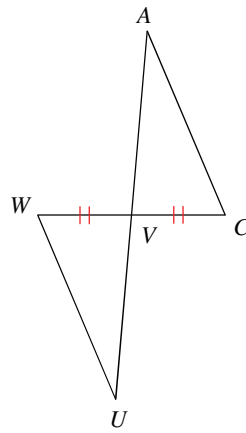
- A) $\angle W \cong \angle R$ or $\angle WVU \cong \angle RVU$
B) $\overline{VU} \cong \overline{VU}$
C) $\angle VUW \cong \angle VUR$
D) $\overline{WV} \cong \overline{RV}$

23) AAS



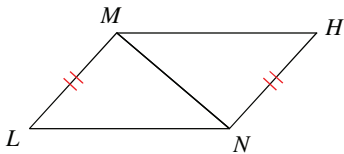
- A) $\angle X \cong \angle G$
- B) $\angle W \cong \angle F$ or $\angle X \cong \angle G$
- C) $\overline{WX} \cong \overline{FG}$ or $\overline{XV} \cong \overline{GE}$
- D) $\angle V \cong \angle E$ or $\angle W \cong \angle F$

24) SAS



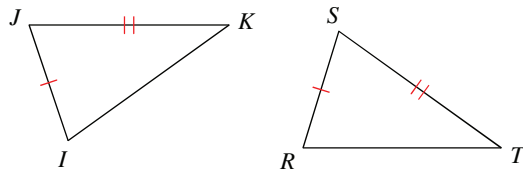
- A) $\angle WVU \cong \angle CVA$ or $\angle U \cong \angle A$
- B) $\overline{VU} \cong \overline{VA}$
- C) $\angle WVU \cong \angle CVA$
- D) $\overline{WV} \cong \overline{CV}$ or $\overline{UW} \cong \overline{AC}$

25) SAS



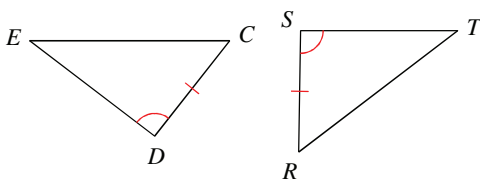
- A) $\angle MNL \cong \angle NMH$
- B) $\angle LMN \cong \angle HNM$ or $\angle MNL \cong \angle NMH$
- C) $\overline{NL} \cong \overline{MH}$
- D) $\angle LMN \cong \angle HNM$

26) SSS



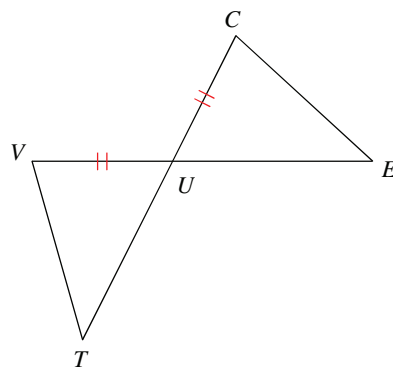
- A) $\angle J \cong \angle S$
- B) $\overline{IJ} \cong \overline{RS}$
- C) $\overline{KI} \cong \overline{TR}$
- D) $\overline{JK} \cong \overline{ST}$

27) SAS



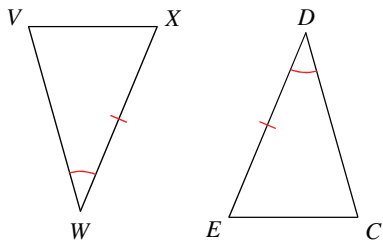
- A) $\overline{EC} \cong \overline{TR}$
- B) $\overline{DE} \cong \overline{ST}$
- C) $\overline{CD} \cong \overline{RS}$ or $\overline{EC} \cong \overline{TR}$
- D) $\angle C \cong \angle R$

28) ASA



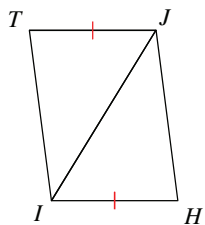
- A) $\angle V \cong \angle C$
- B) $\angle V \cong \angle C$ or $\angle T \cong \angle E$
- C) $\angle T \cong \angle E$
- D) $\angle V \cong \angle C$ or $\angle VUT \cong \angle CUE$

29) SAS



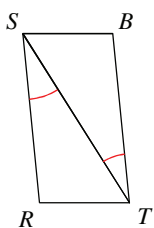
- A) $\angle W \cong \angle D$
- B) $\overline{XW} \cong \overline{ED}$ or $\overline{WV} \cong \overline{DC}$
- C) $\overline{WV} \cong \overline{DC}$
- D) $\angle X \cong \angle E$ or $\angle V \cong \angle C$

30) SAS



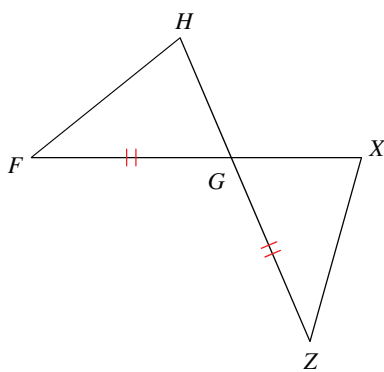
- A) $\overline{HI} \cong \overline{TJ}$
- B) $\overline{IJ} \cong \overline{JI}$ or $\overline{JH} \cong \overline{IT}$
- C) $\angle HIJ \cong \angle TJI$
- D) $\overline{IJ} \cong \overline{JI}$

31) AAS



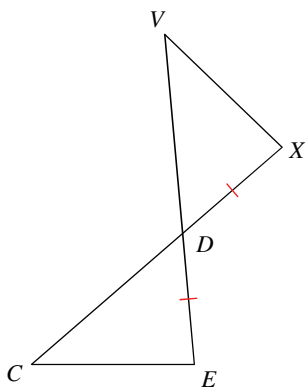
- A) $\overline{ST} \cong \overline{TS}$
- B) $\angle RST \cong \angle BTS$ or $\angle STR \cong \angle TSB$
- C) $\overline{RS} \cong \overline{BT}$
- D) $\angle R \cong \angle B$

32) AAS



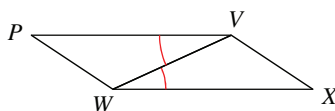
- A) $\overline{HG} \cong \overline{XG}$ or $\overline{GF} \cong \overline{GZ}$
- B) $\angle H \cong \angle X$
- C) $\angle F \cong \angle Z$
- D) $\overline{HG} \cong \overline{XG}$

33) AAS



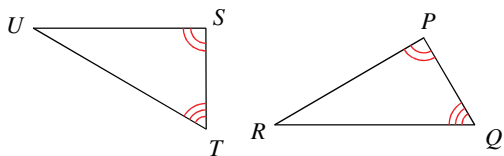
- A) $\overline{CD} \cong \overline{VD}$
- B) $\angle CDE \cong \angle VDX$
- C) $\angle C \cong \angle V$
- D) $\overline{CD} \cong \overline{VD}$ or $\overline{EC} \cong \overline{XV}$

34) SAS



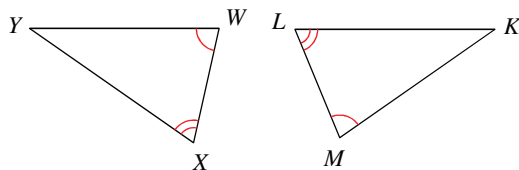
- A) $\angle XWV \cong \angle PVW$
- B) $\angle WVX \cong \angle VWP$
- C) $\angle XWV \cong \angle PVW$ or $\angle WVX \cong \angle VWP$
- D) $\overline{XW} \cong \overline{PV}$

35) AAS



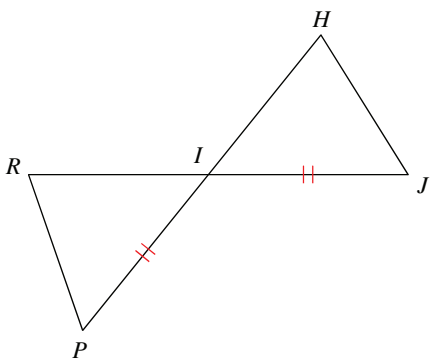
- A) $\angle S \cong \angle P$
- B) $\angle S \cong \angle P$ or $\angle U \cong \angle R$
- C) $\overline{TU} \cong \overline{QR}$ or $\overline{US} \cong \overline{RP}$
- D) $\angle T \cong \angle Q$ or $\angle U \cong \angle R$

36) AAS



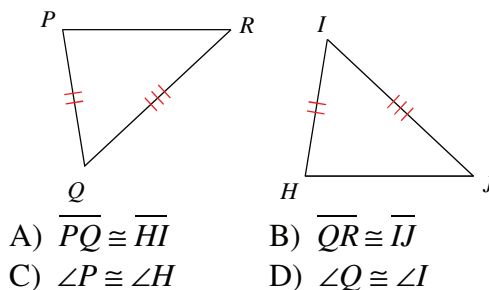
- A) $\overline{WX} \cong \overline{ML}$ or $\overline{YW} \cong \overline{KM}$
- B) $\overline{XY} \cong \overline{LK}$ or $\overline{YW} \cong \overline{KM}$
- C) $\angle W \cong \angle M$ or $\angle Y \cong \angle K$
- D) $\angle Y \cong \angle K$

37) SAS



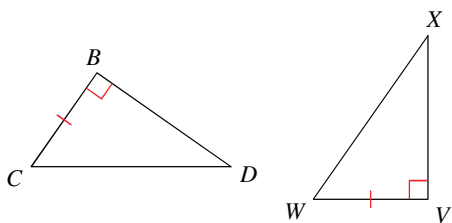
- A) $\overline{JI} \cong \overline{PI}$ or $\overline{IH} \cong \overline{IR}$
- B) $\overline{IH} \cong \overline{IR}$
- C) $\angle J \cong \angle P$ or $\angle JIH \cong \angle PIR$
- D) $\overline{IH} \cong \overline{IR}$ or $\overline{HJ} \cong \overline{RP}$

38) SAS



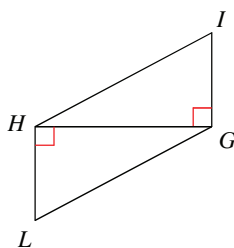
- A) $\overline{PQ} \cong \overline{HI}$
- B) $\overline{QR} \cong \overline{IJ}$
- C) $\angle P \cong \angle H$
- D) $\angle Q \cong \angle I$

39) SAS



- A) $\angle C \cong \angle W$
- B) $\overline{DB} \cong \overline{XV}$
- C) $\overline{BC} \cong \overline{VW}$
- D) $\angle B \cong \angle V$

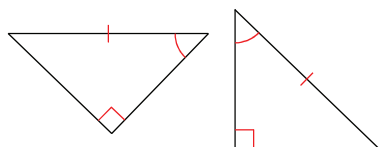
40) ASA



- A) $\angle IGH \cong \angle LHG$ or $\angle GHI \cong \angle HGL$
- B) $\angle GHI \cong \angle HGL$ or $\angle I \cong \angle L$
- C) $\angle IGH \cong \angle LHG$
- D) $\overline{GH} \cong \overline{HG}$ or $\overline{HI} \cong \overline{GL}$

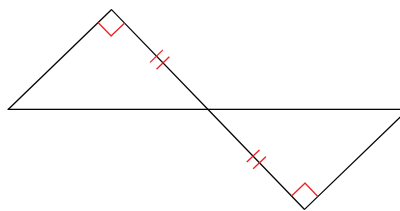
State if the two triangles are congruent. If they are, state how you know. If you assume a part congruent, mark it in color on the diagram.

41)



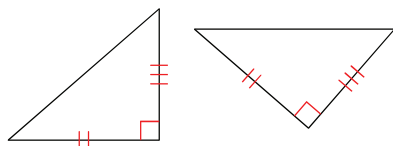
- A) Not congruent B) LA
C) HA D) LL

42)



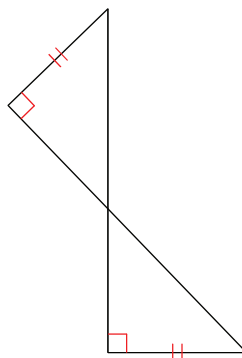
- A) HL B) LL
C) HA D) LA

43)



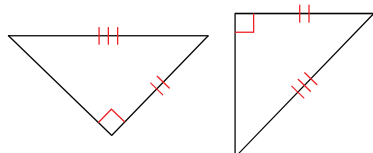
- A) HA B) LA
C) LL D) HL

44)



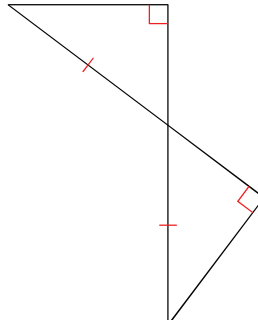
- A) LL B) HL
C) LA D) HA

45)



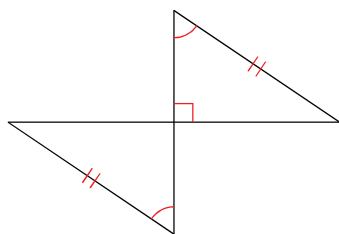
- A) HL B) LL
C) Not congruent D) HA

46)



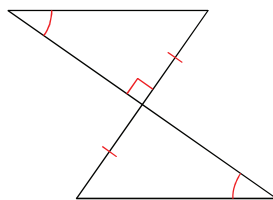
- A) HA B) LA
C) HL D) Not congruent

47)



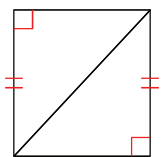
- A) HA B) LL
C) Not congruent D) LA

48)



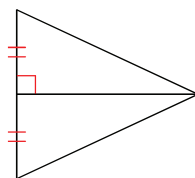
- A) Not congruent B) LA
C) HL D) HA

49)



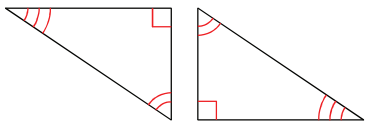
- A) HA B) HL
C) LA D) Not congruent

50)



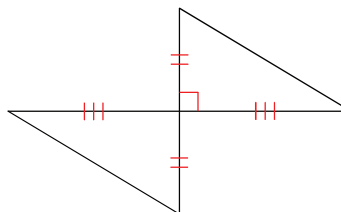
- A) LA B) Not congruent
C) HL D) LL

51)



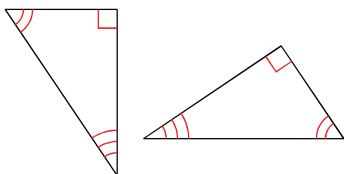
- A) LL B) HA
C) Not congruent D) LA

52)



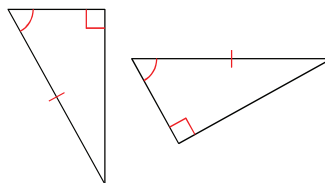
- A) HL B) HA
C) LA D) LL

53)



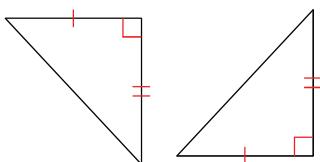
- A) LA B) Not congruent
C) LL D) HA

54)



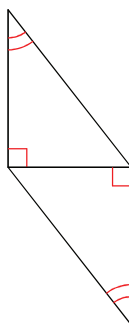
- A) Not congruent B) HL
C) HA D) LL

55)



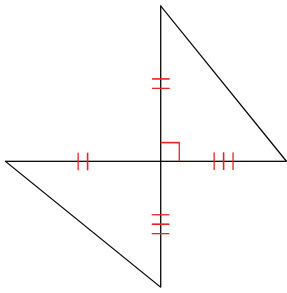
- A) LL B) LA
C) Not congruent D) HL

56)



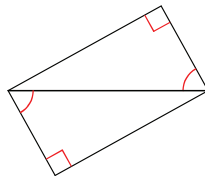
- A) Not congruent B) LL
C) LA D) HA

57)



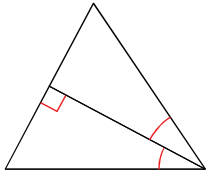
- A) LL B) HL
C) Not congruent D) LA

58)



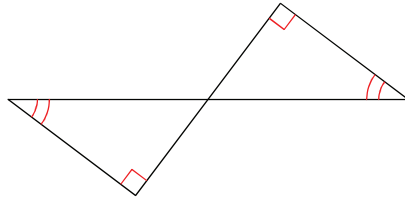
- A) HA B) LL
C) LA D) HL

59)



- A) LL B) HL
C) LA D) Not congruent

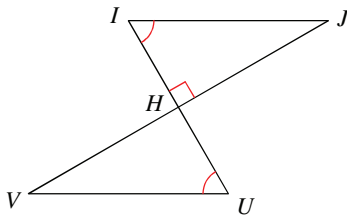
60)



- A) Not congruent B) LA
C) HL D) LL

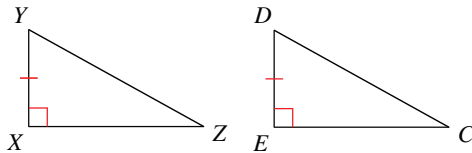
State what additional information is required in order to know that the triangles are congruent for the reason given.

61) HA



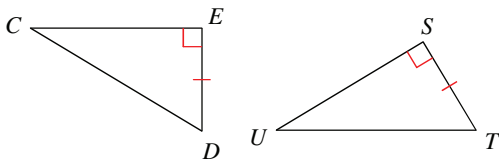
- A) $\overline{JH} \cong \overline{VH}$ B) $\angle J \cong \angle V$
C) $\angle JHI \cong \angle VHU$ D) $\overline{IJ} \cong \overline{UV}$

62) LL



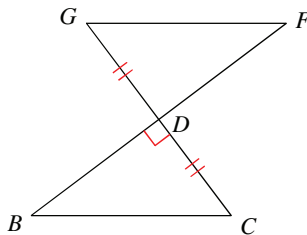
- A) $\overline{YZ} \cong \overline{DC}$ B) $\angle Z \cong \angle C$
C) $\overline{ZX} \cong \overline{CE}$ D) $\overline{XY} \cong \overline{ED}$

63) LL



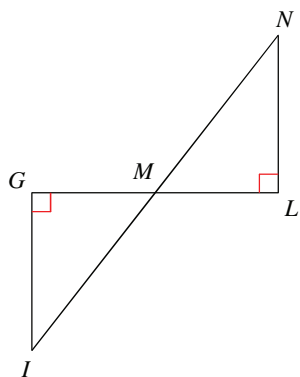
- A) $\overline{DC} \cong \overline{TU}$ B) $\angle E \cong \angle S$
C) $\overline{CE} \cong \overline{US}$ D) $\angle D \cong \angle T$

64) LA



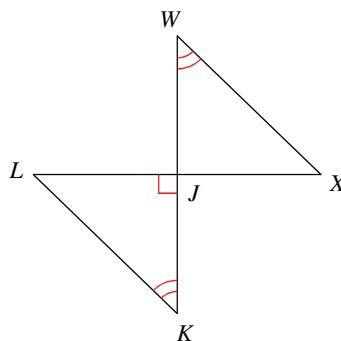
- A) $\overline{CB} \cong \overline{GF}$ or $\overline{BD} \cong \overline{FD}$
B) $\overline{DC} \cong \overline{DG}$ or $\overline{BD} \cong \overline{FD}$
C) $\angle C \cong \angle G$ or $\angle B \cong \angle F$
D) $\overline{DC} \cong \overline{DG}$ or $\overline{CB} \cong \overline{GF}$

65) HA



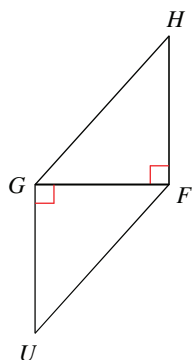
- A) $\overline{LM} \cong \overline{GM}$ or $\overline{NL} \cong \overline{IG}$
- B) $\angle L \cong \angle G$
- C) $\overline{MN} \cong \overline{MI}$
- D) $\overline{LM} \cong \overline{GM}$

66) HA



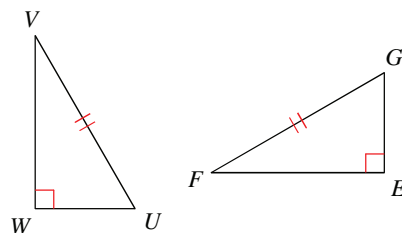
- A) $\angle LJK \cong \angle XJW$ or $\angle K \cong \angle W$
- B) $\overline{KL} \cong \overline{WX}$
- C) $\overline{JK} \cong \overline{JW}$
- D) $\angle LJK \cong \angle XJW$

67) LA



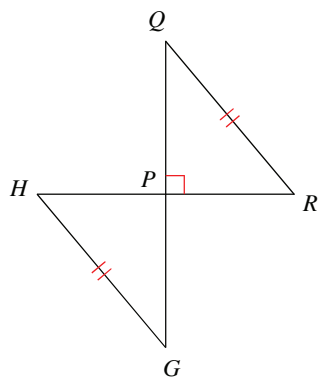
- A) $\angle FGH \cong \angle GFU$ or $\angle H \cong \angle U$
- B) $\angle HFG \cong \angle UGF$ or $\angle H \cong \angle U$
- C) $\overline{FG} \cong \overline{GF}$ or $\overline{HF} \cong \overline{UG}$
- D) $\angle FGH \cong \angle GFU$

68) HA



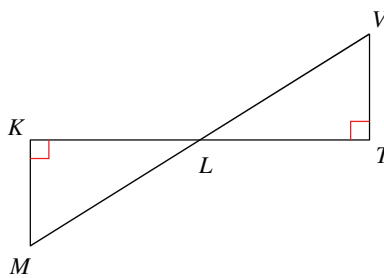
- A) $\angle W \cong \angle E$ or $\angle U \cong \angle G$
- B) $\angle U \cong \angle G$
- C) $\angle V \cong \angle F$ or $\angle U \cong \angle G$
- D) $\angle W \cong \angle E$ or $\angle V \cong \angle F$

69) HL



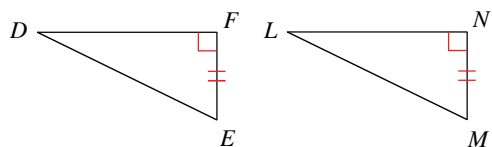
- A) $\angle R \cong \angle H$
- B) $\overline{PQ} \cong \overline{PG}$ or $\overline{RP} \cong \overline{HP}$
- C) $\angle Q \cong \angle G$ or $\angle R \cong \angle H$
- D) $\overline{QR} \cong \overline{GH}$ or $\overline{RP} \cong \overline{HP}$

70) LA



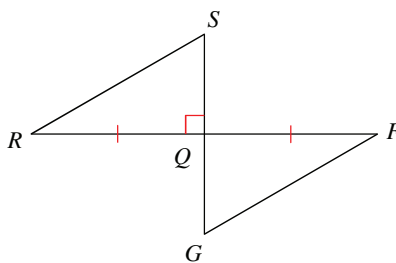
- A) $\overline{LM} \cong \overline{LV}$ or $\overline{MK} \cong \overline{VT}$
- B) $\overline{LM} \cong \overline{LV}$
- C) $\overline{KL} \cong \overline{TL}$
- D) $\overline{KL} \cong \overline{TL}$ or $\overline{MK} \cong \overline{VT}$

71) HL



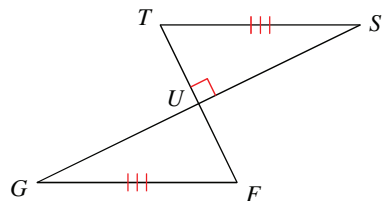
- A) $\overline{ED} \cong \overline{ML}$
- B) $\angle F \cong \angle N$ or $\angle E \cong \angle M$
- C) $\overline{FE} \cong \overline{NM}$
- D) $\angle E \cong \angle M$

72) HL



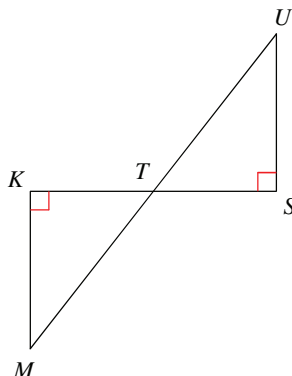
- A) $\angle R \cong \angle F$
- B) $\angle S \cong \angle G$
- C) $\angle SQR \cong \angle GQF$ or $\angle S \cong \angle G$
- D) $\overline{RS} \cong \overline{FG}$

73) HL



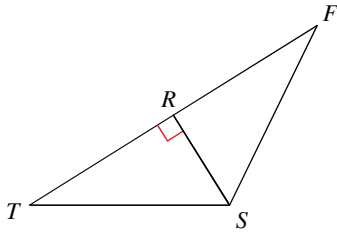
- A) $\angle SUT \cong \angle GUF$ or $\angle T \cong \angle F$
- B) $\angle T \cong \angle F$ or $\angle S \cong \angle G$
- C) $\overline{UT} \cong \overline{UF}$ or $\overline{SU} \cong \overline{GU}$
- D) $\overline{TS} \cong \overline{FG}$

74) LA



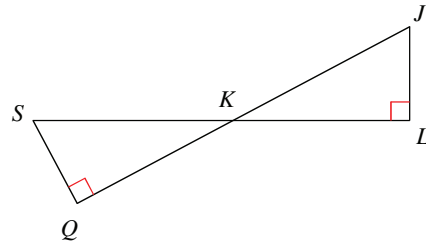
- A) $\angle STU \cong \angle KTM$
- B) $\angle STU \cong \angle KTM$ or $\angle U \cong \angle M$
- C) $\overline{ST} \cong \overline{KT}$ or $\overline{US} \cong \overline{MK}$
- D) $\overline{TU} \cong \overline{TM}$ or $\overline{US} \cong \overline{MK}$

75) LA



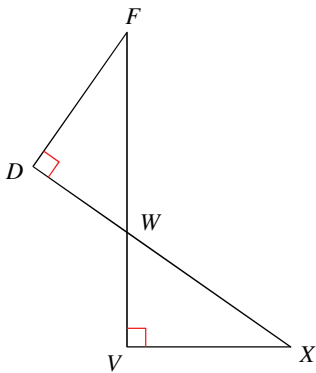
- A) $\overline{ST} \cong \overline{SF}$ or $\overline{TR} \cong \overline{FR}$
- B) $\overline{ST} \cong \overline{SF}$
- C) $\angle TRS \cong \angle FRS$ or $\angle T \cong \angle F$
- D) $\angle RST \cong \angle RSF$ or $\angle T \cong \angle F$

76) HA



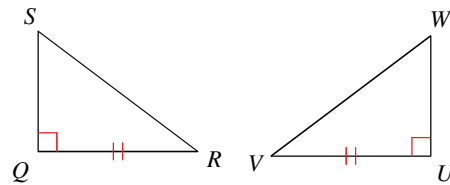
- A) $\angle LKJ \cong \angle QKS$
- B) $\overline{KJ} \cong \overline{KS}$
- C) $\angle L \cong \angle Q$
- D) $\angle LKJ \cong \angle QKS$ or $\angle J \cong \angle S$

77) LA



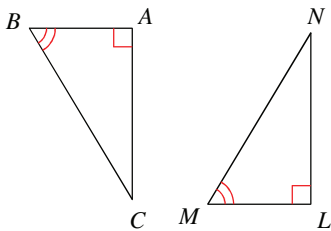
- A) $\overline{WX} \cong \overline{WF}$
- B) $\angle V \cong \angle D$ or $\angle VWX \cong \angle DWF$
- C) $\overline{VW} \cong \overline{DW}$
- D) $\overline{VW} \cong \overline{DW}$ or $\overline{XV} \cong \overline{FD}$

78) HL



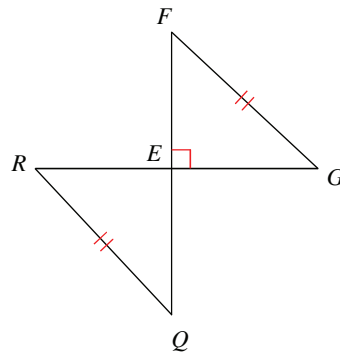
- A) $\angle S \cong \angle W$
- B) $\angle R \cong \angle V$
- C) $\overline{QR} \cong \overline{UV}$ or $\overline{SQ} \cong \overline{WU}$
- D) $\overline{RS} \cong \overline{VW}$

79) LA



- A) $\overline{AB} \cong \overline{LM}$ or $\overline{CA} \cong \overline{NL}$
- B) $\angle A \cong \angle L$ or $\angle B \cong \angle M$
- C) $\overline{AB} \cong \overline{LM}$
- D) $\overline{AB} \cong \overline{LM}$ or $\overline{BC} \cong \overline{MN}$

80) HL



- A) $\overline{EF} \cong \overline{ER}$ or $\overline{GE} \cong \overline{QE}$
- B) $\angle GEF \cong \angle QER$ or $\angle F \cong \angle R$
- C) $\angle GEF \cong \angle QER$ or $\angle G \cong \angle Q$
- D) $\overline{EF} \cong \overline{ER}$