Geometry

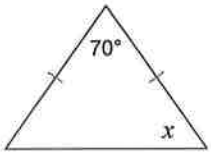
Name_____

5.4-5.5 BAT, SSS and HL

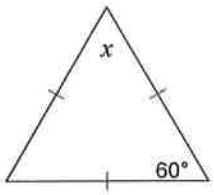
Date_____ Period____

Find the value of x.

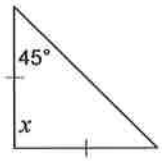
1)



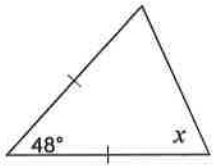
2)



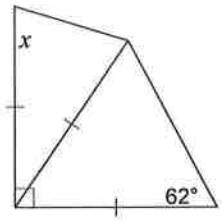
3)



4)



5)



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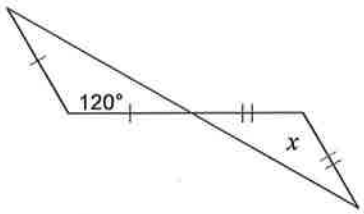
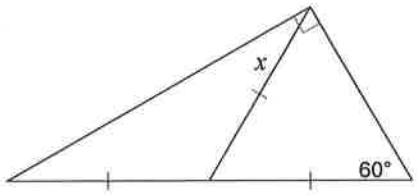
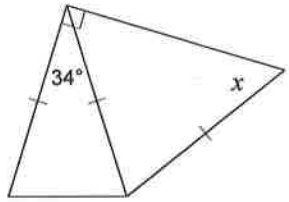


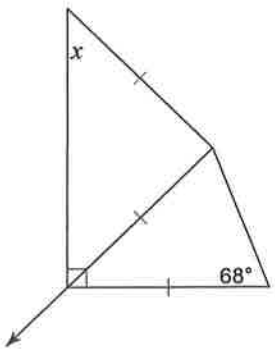
7)



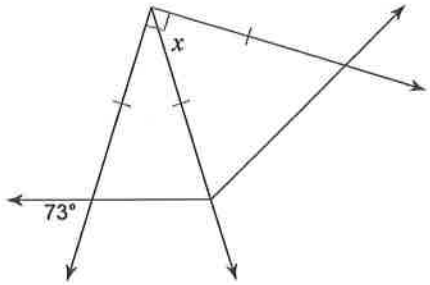
8)

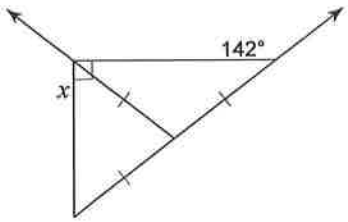


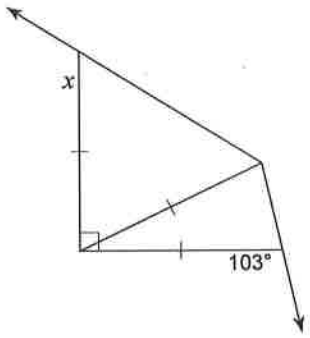
9)



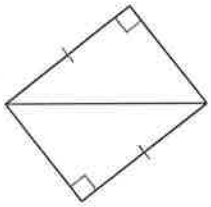
10)

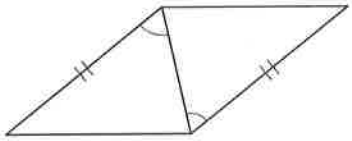


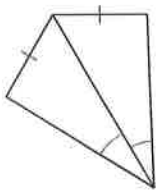
11) 

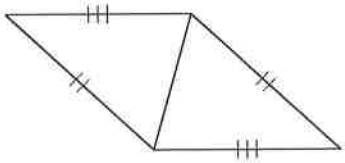
12) 

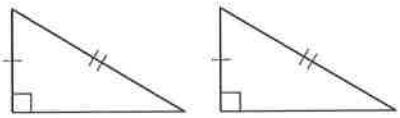
Determine if the two triangles are congruent. If they are, state how you know.

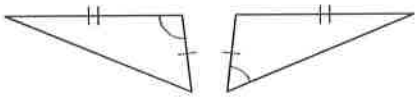
13) 

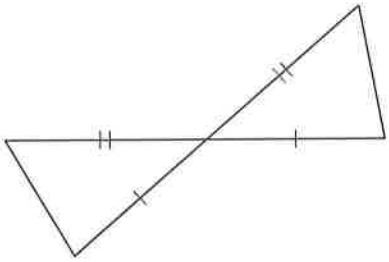
14) 

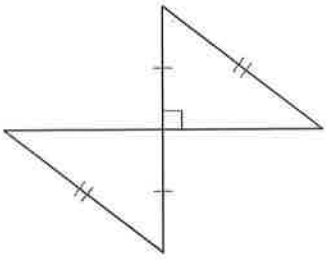
15) 

16) 

17) 

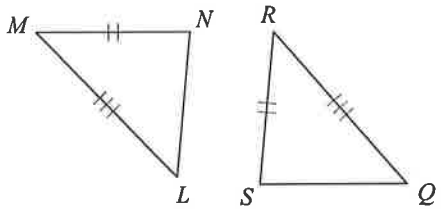
18) 

19) 

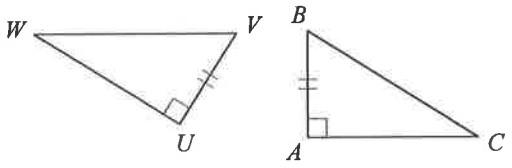
20) 

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

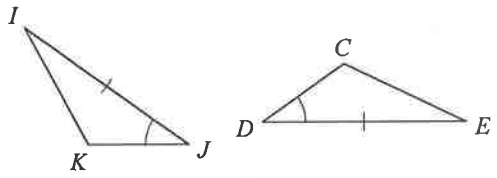
21) SAS



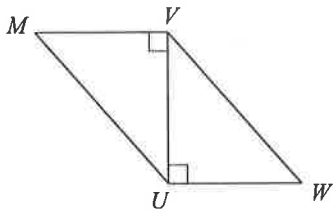
22) HL



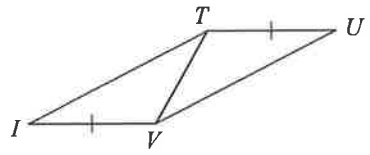
23) SAS



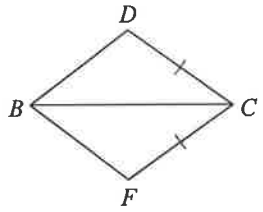
24) HL



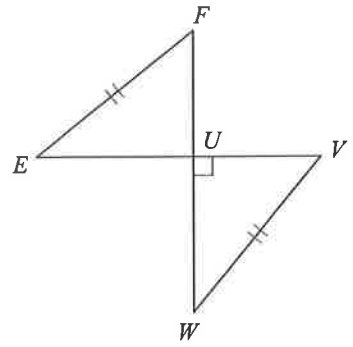
25) SSS



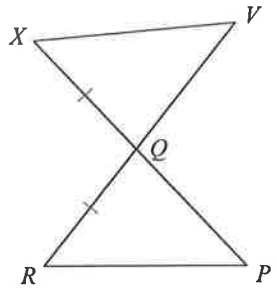
26) SAS



27) HL



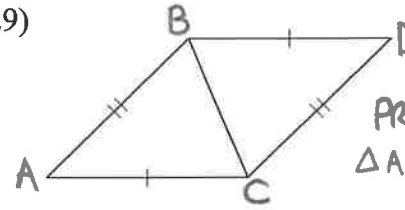
28) SAS



1) 55° 3) 90° 5) 73° 7) 30°
9) 46° 11) 128° 13) HL
15) Not enough information 17) HL 19) SAS
21) $\angle M \cong \angle R$ 23) $\overline{JK} \cong \overline{DC}$ 25) $\overline{UV} \cong \overline{IT}$
27) $\overline{UV} \cong \overline{UF}$ or $\overline{WU} \cong \overline{EU}$

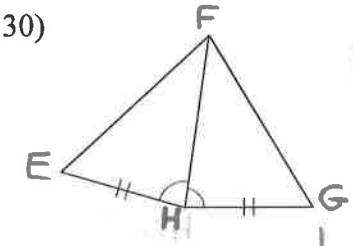
Complete the two column proofs. State all the marked information as given.

29)



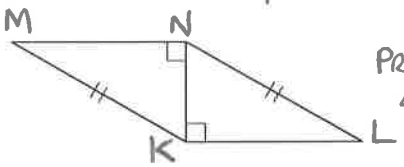
PROVE:
$\triangle ABC \cong \triangle DCB$

30)



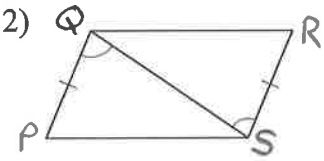
PROVE:
$\triangle EFH \cong \triangle GFH$

31)



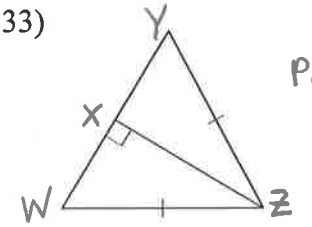
PROVE:
$\triangle MNK \cong \triangle LKN$

32)



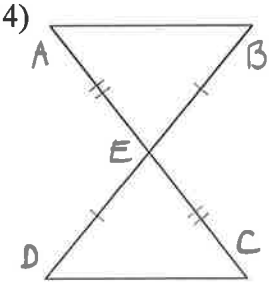
PROVE:
$\triangle PQS \cong \triangle RSQ$

33)



PROVE:
$\angle Y \cong \angle W$

34)



PROVE:
$\overline{AB} \cong \overline{CD}$