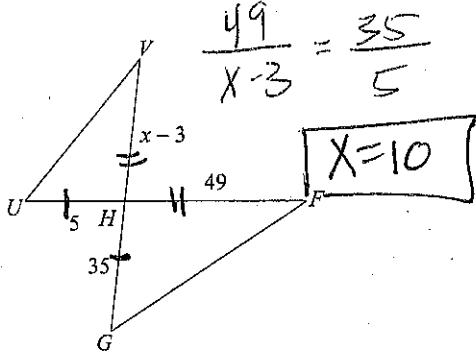


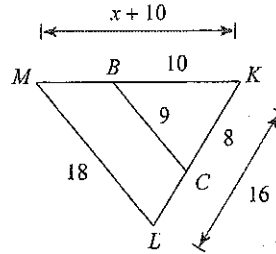
Proving triangles Similar

Solve for x. The triangles in each pair are similar.

1) $\triangle HGF \sim \triangle HUV$

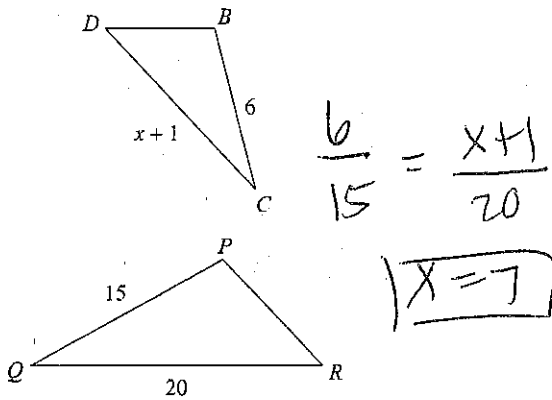


2)

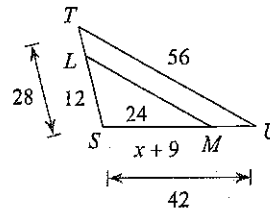


Handwritten work: $X = 10$
 $\frac{1}{2}$ SF
 $\frac{9}{18} = \frac{8}{16} = \frac{10}{x+10}$

3) $\triangle PQR \sim \triangle BCD$



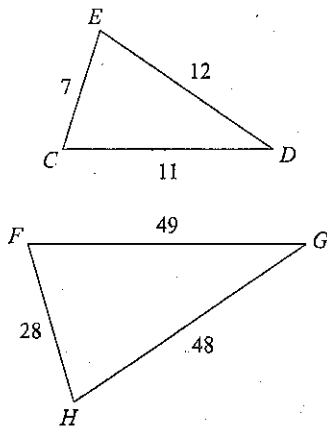
4)



Handwritten work: $\frac{x+9}{42} = \frac{12}{28}$
 $X = 9$

State if the triangles in each pair are similar. If so, state how you know they are similar and complete the similarity statement.

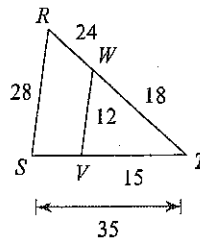
5)



$\triangle FGH \sim$ Not similar

Handwritten work: $\frac{7}{28} \neq \frac{11}{48} \neq \frac{12}{49}$

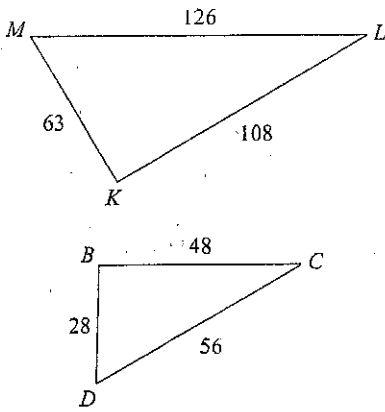
6)



$\triangle TSR \sim \triangle TVW$

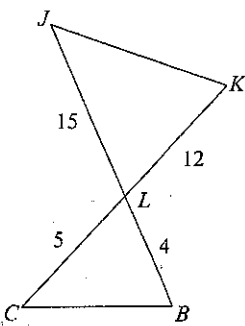
SSS and SAS

7)



$\triangle KLM \sim \triangle BCD$ by SSS

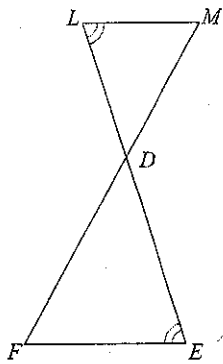
9)



SAS

$\triangle LKJ \sim \triangle LBC$

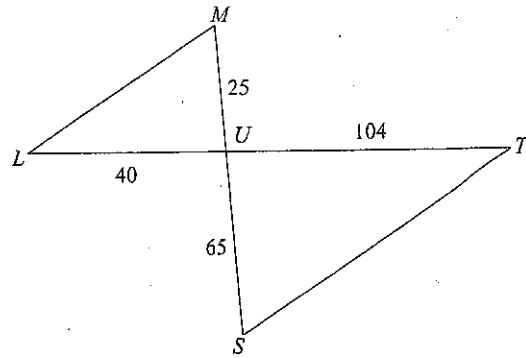
11)



$\triangle DEF \sim \triangle DLM$

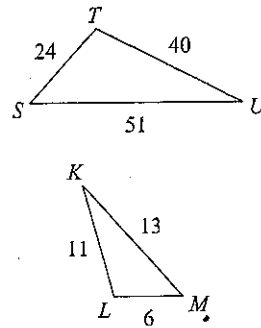
AA

8)



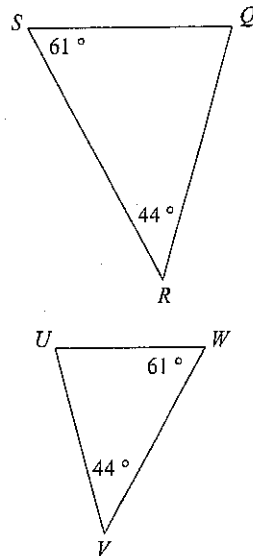
$\triangle UTS \sim \triangle ULM$ SAS

10)



$\triangle STU \sim$ not similar

12)



AA

$\triangle SRQ \sim \triangle UVW$