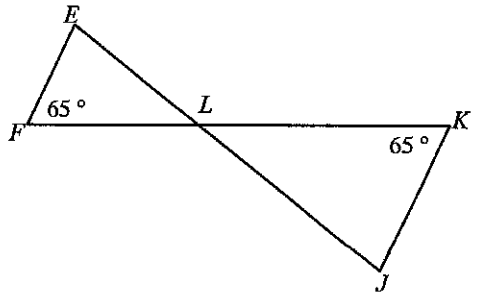
Geometry Name_____ ID: 1

Midterm Exam Rev. 5 Practice Date_____ Period____

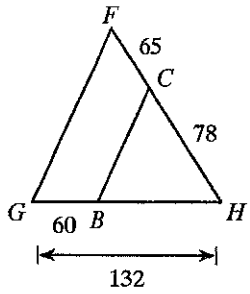
State if the triangles in each pair are similar. If so, state how you know they are similar and complete the similarity statement.

1)



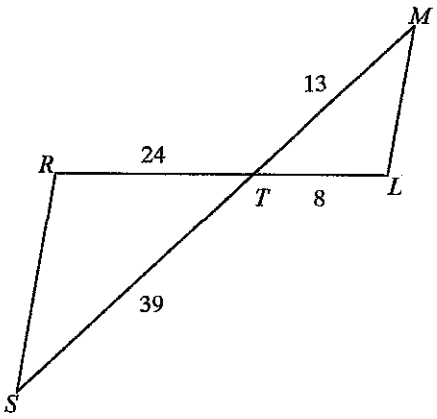
$\triangle LKJ \sim$ _____

2)



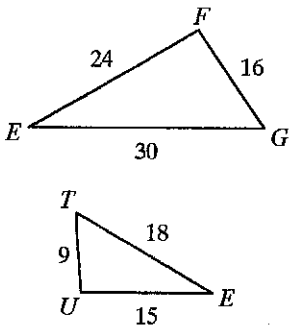
$\triangle HGF \sim$ _____

3)



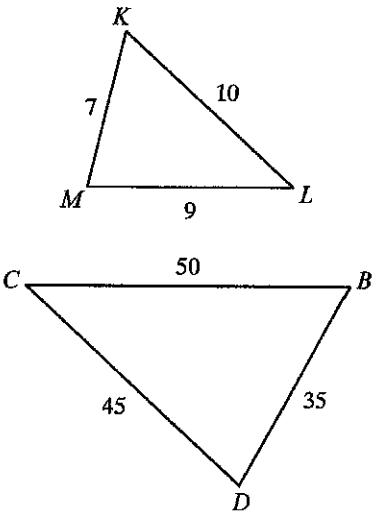
$\triangle TSR \sim$ _____

4)



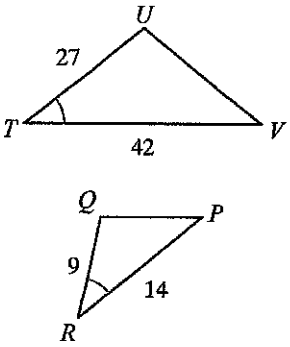
$\triangle EFG \sim$ _____

5)



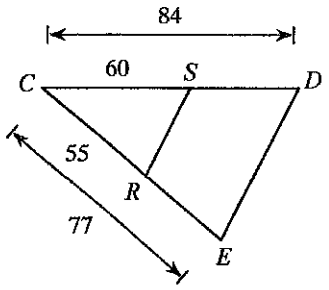
$\triangle BCD \sim$ _____

6)



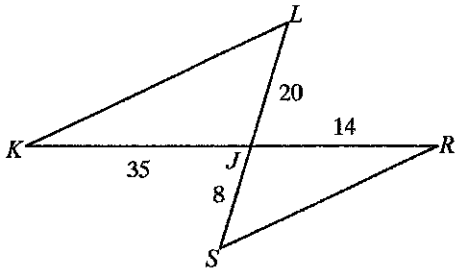
$\triangle TUV \sim$ _____

7)



$\Delta CDE \sim$ _____

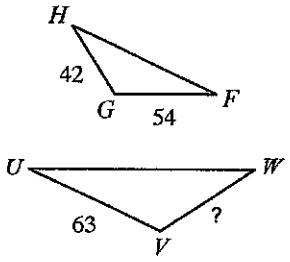
8)



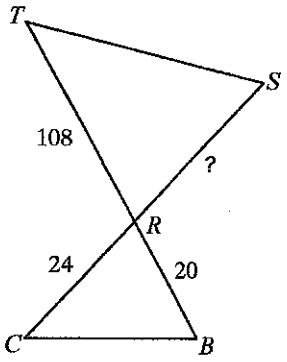
$\Delta JKL \sim$ _____

Find the missing length. The triangles in each pair are similar.

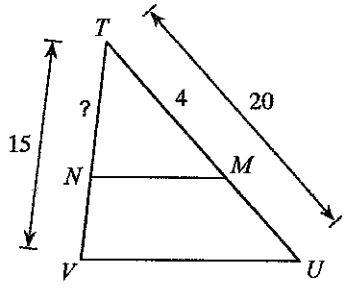
9) $\Delta UVW \sim \Delta FGH$



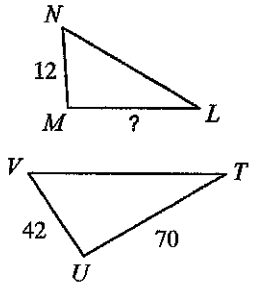
10) $\Delta RST \sim \Delta RBC$



11)



12) $\Delta TUV \sim \Delta LMN$



Geometry Name Key ID: 1

Assignment

Date _____ Period ____

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

1)

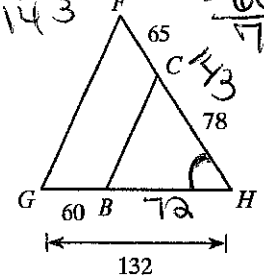
$\angle F \cong \angle K$

$\angle FLE \cong \angle KLJ$ (VA)

order matters

$\triangle LKJ \sim \triangle LFE$ by AA~

2)



65
78
143

132
−60
72

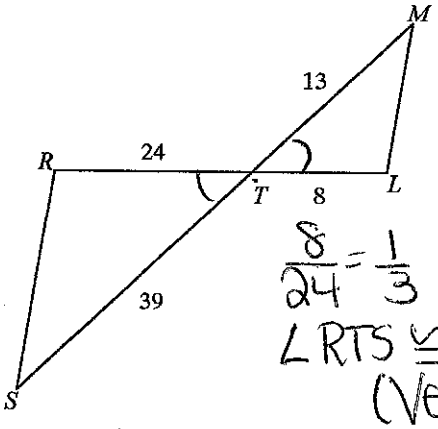
$\frac{72}{130} = \frac{6}{11}$

$\frac{78}{143} = \frac{6}{11}$

$\angle CHB \cong \angle FHG$ (Reflexive)

$\triangle HGF \sim \triangle HBC$ by SAS~

3)

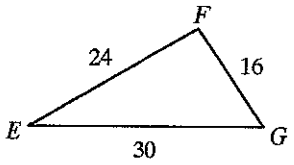


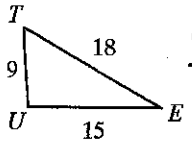
$\frac{8}{24} = \frac{1}{3}$ $\frac{13}{39} = \frac{1}{3}$

$\angle RTS \cong \angle LTM$ (Vertical)

$\triangle TSR \sim \triangle TML$ by SAS~

4)

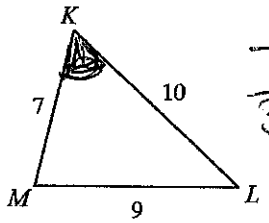




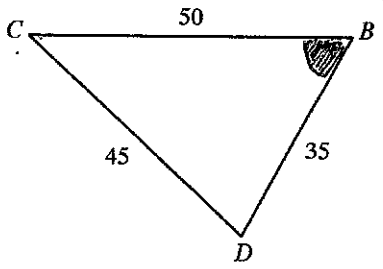
$\frac{9}{16}$ $\frac{15}{24} = \frac{5}{8}$

$\triangle EFG \sim$ not similar

5)



$\frac{7}{35} = \frac{1}{5}$

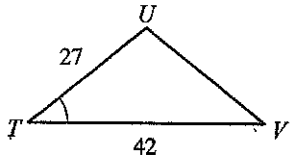


$\frac{9}{45} = \frac{1}{5}$

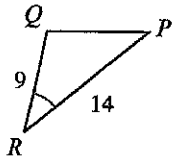
$\frac{10}{50} = \frac{1}{5}$

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

6)



$\frac{9}{27} = \frac{1}{3}$

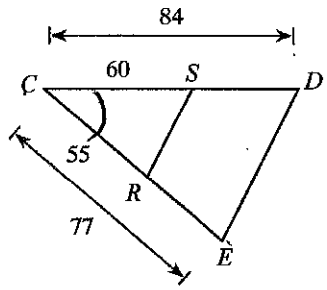


$\frac{14}{42} = \frac{1}{3}$

$\angle R \cong \angle T$

$\triangle TUV \sim \triangle RQP$ by SAS~

7)



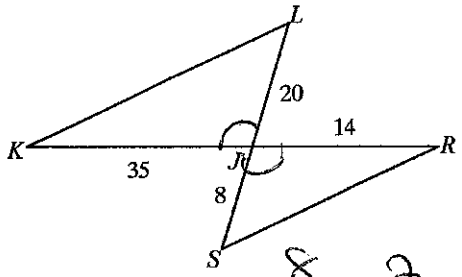
$\frac{60}{84} = \frac{5}{7}$

$\frac{55}{77} = \frac{5}{7}$

$\triangle CDE \sim \triangle CSR$ by SAS~

$\angle SCR \cong \angle DCE$ (Reflexive)

8)

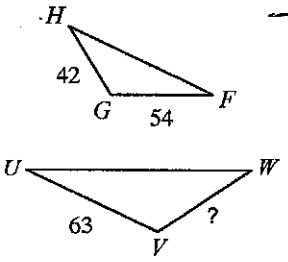


$\triangle JKL \sim \triangle JRS$ $\frac{8}{20} = \frac{2}{5}$ $\frac{14}{35} = \frac{2}{5}$

$\angle LJK \cong \angle RJS$ (Vertical)

Find the missing length. The triangles in each pair are similar.

9) $\triangle UVW \sim \triangle FGH$



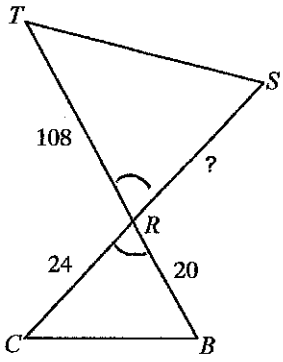
$\frac{42}{x} = \frac{54}{63}$

$54x = 2646$

$\div 54 \quad \div 54$

$x = 49$

10) $\triangle RST \sim \triangle RBC$



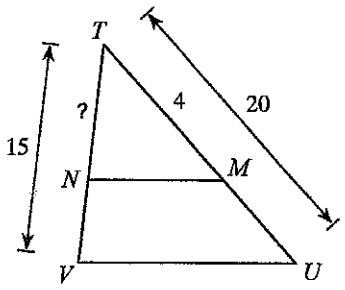
$\frac{20}{x} = \frac{24}{108}$

$24x = 2160$

$\div 24 \quad \div 24$

$x = 90$

11)



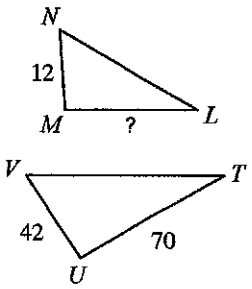
$\frac{x}{15} = \frac{4}{20}$

$20x = 60$

$\div 20 \quad \div 20$

$x = 3$

12) $\triangle TUV \sim \triangle LMN$



$\frac{12}{42} = \frac{x}{70}$

$42x = 840$

$\div 42 \quad \div 42$

$x = 20$