

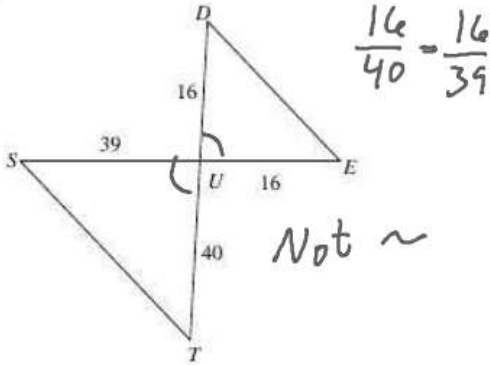
Similar Triangles

SSS, AA, SAS

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)

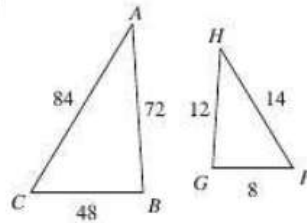


$$\frac{16}{40} = \frac{16}{39}$$

Not ~

ΔUTS ~ _____

2)



$$\frac{14}{84} = \frac{12}{72} = \frac{8}{48}$$

$$.1\bar{6} \quad .1\bar{6} \quad .1\bar{6}$$

$$\frac{1}{6} \quad \frac{1}{6} \quad \left(\frac{1}{6}\right)$$

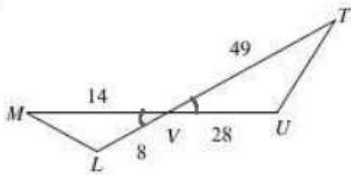
SSS

ΔCBA ~ ΔFGH

Smaller → $k = \frac{1}{6}$

Bigger → $k = \frac{6}{1}$

3)



$$\frac{8}{28} = \frac{14}{49}$$

$$\frac{2}{7} = \frac{2}{7}$$

$$.28 = .28$$

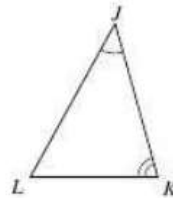
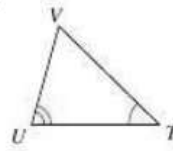
ΔVUT ~ ΔVLM

SAS

Smaller $k = \frac{2}{7}$

Bigger $k = \frac{7}{2}$

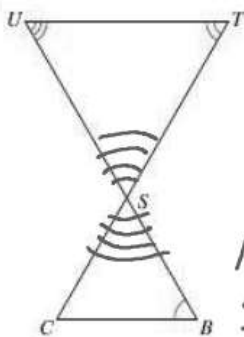
4)



AA

ΔJKL ~ ΔUV

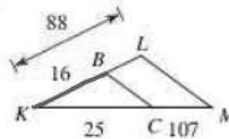
5)



Not Similar

ΔSTU ~ _____

6)

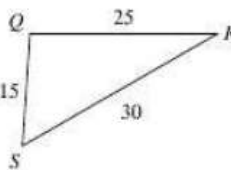
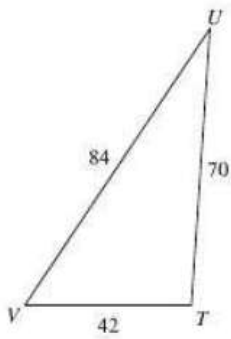


$$\frac{16}{88} \neq \frac{25}{132}$$

Not Similar

ΔKLM ~ _____

7)



$\triangle UVW \sim \triangle QRS$

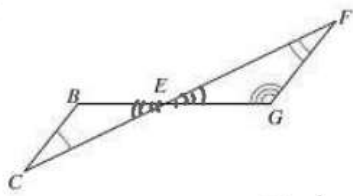
$$\frac{84}{30} = \frac{70}{25} = \frac{42}{15}$$

2.8
 $\frac{14}{5}$

Smaller $k = \frac{5}{14}$

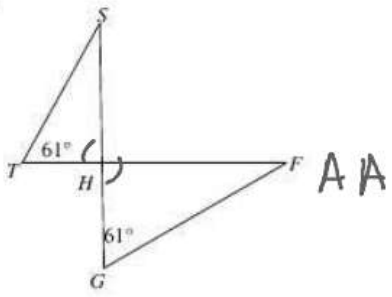
Bigger $k = \frac{14}{5}$

8)



$\triangle BEG \sim \triangle FEG$ Not Similar

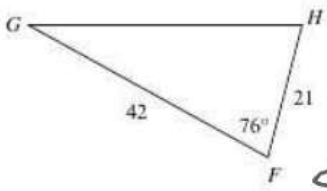
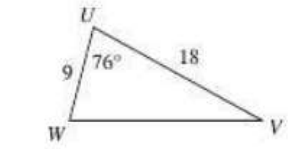
9)



$\triangle THG \sim \triangle FGH$

AA

10)



$\triangle GFH \sim \triangle UVW$

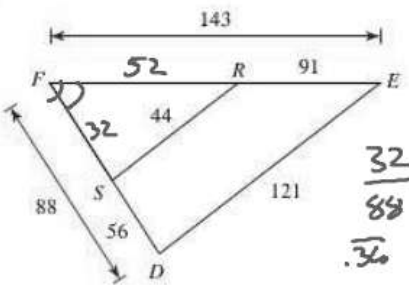
$$\frac{21}{9} = \frac{42}{18}$$

$$\frac{9}{21} = \frac{18}{42}$$

SAS

Smaller $\frac{3}{7}$
Bigger $\frac{7}{3}$

11)



$\triangle FED \sim \triangle FRS$

$$\frac{32}{88} = \frac{52}{143} = \frac{44}{121}$$

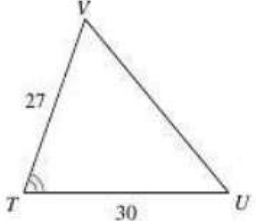
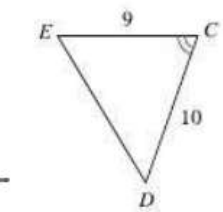
$$\frac{32}{88} = \frac{52}{143} = \frac{44}{121}$$

SSS
SAS

Smaller $k = \frac{4}{11}$

Bigger $k = \frac{11}{4}$

12)



$\triangle TVU \sim \triangle EDC$

$$\frac{9}{27} = \frac{10}{30}$$

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

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

SAS

Smaller $k = \frac{1}{3}$
Bigger $\frac{3}{1}$