Geometry Name Key ID: 1

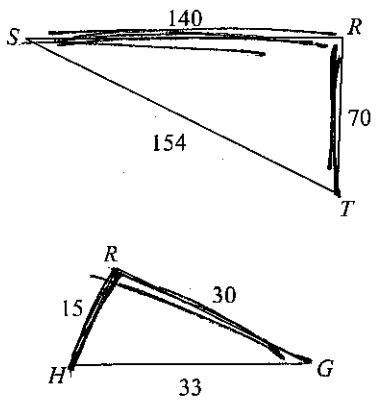


# Side Side Side Similarity

Date _____ Period ____

**State if the triangles in each pair are similar by SSS Similarity. If similar, write the scale factor that supports your statement**

1) $\triangle RST \sim \triangle RGH$



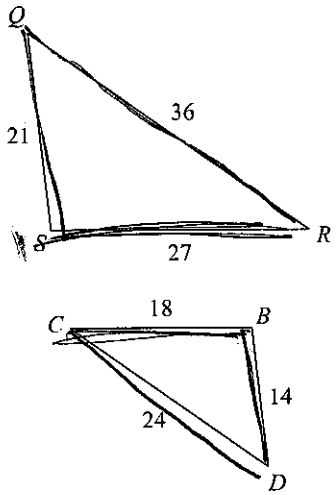

similar; SSS similarity

$\frac{140}{30} = \frac{14}{3}$

$\frac{70}{15} = \frac{14}{3}$

$\frac{154}{33} = \frac{14}{3}$

2) $\triangle QRS \sim \triangle DCB$

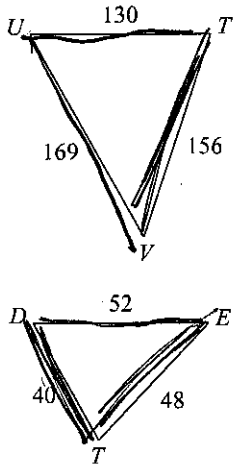



similar; SSS similarity

$\frac{21}{14} = \frac{3}{2}$ $\frac{36}{24} = \frac{3}{2}$ $\frac{27}{18} = \frac{3}{2}$

yes

3) $\triangle TUV \sim \triangle TDE$



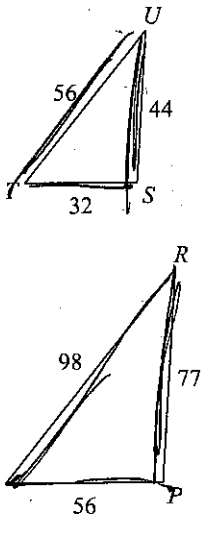

similar; SSS similarity

$\frac{130}{40} = \frac{13}{4}$

$\frac{169}{52} = \frac{13}{4}$

$\frac{156}{48} = \frac{13}{4}$

4) $\triangle PQR \sim \triangle STU$




similar; SSS similarity

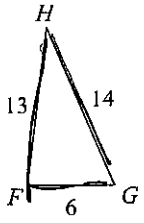
$\frac{32}{56} = \frac{4}{7}$

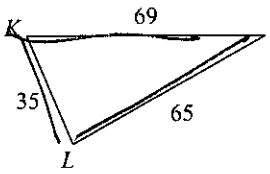
$\frac{44}{77} = \frac{4}{7}$

$\frac{56}{98} = \frac{4}{7}$

yes!

5) $\triangle JKL \sim \triangle HGF$




not similar

$\frac{6}{35} = \frac{6}{35}$

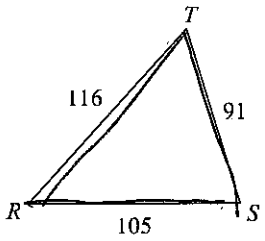
$\frac{13}{65} = \frac{13}{65}$

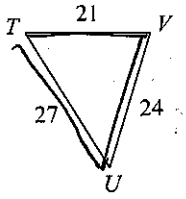
$\frac{14}{65} = \frac{14}{65}$

Not similar

$\frac{6}{35} \neq \frac{13}{65} \neq \frac{14}{65}$

6) $\triangle TSR \sim \triangle TVU$




not similar

$\frac{91}{21} = \frac{13}{3}$

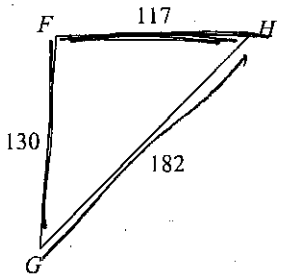
$\frac{105}{24} = \frac{35}{8}$

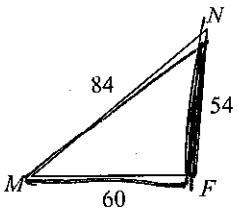
$\frac{116}{27} = \frac{116}{27}$

$\frac{13}{3} \neq \frac{35}{8} \neq \frac{116}{27}$

Not similar

7) $\triangle FGH \sim \triangle FMN$




similar; SSS similarity

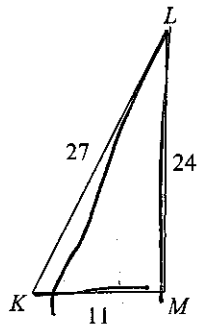
$\frac{182}{84} = \frac{13}{6}$

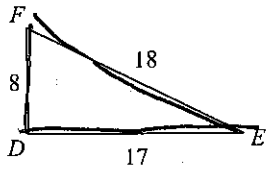
$\frac{130}{60} = \frac{13}{6}$

$\frac{117}{54} = \frac{13}{6}$

Yes, Similar

8) $\triangle KLM \sim \triangle FED$




not similar

$\frac{27}{18} = \frac{3}{2}$

$\frac{24}{17} = \frac{24}{17}$

$\frac{11}{8} = \frac{11}{8}$

Not similar