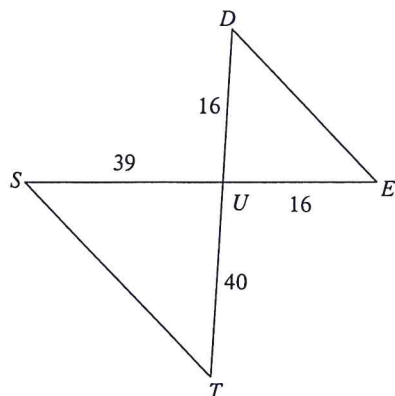


Similar Triangles

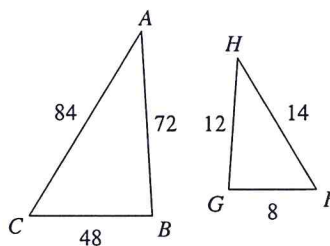
Date _____ Period _____

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

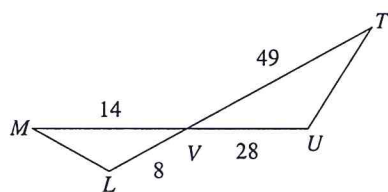
1)

 $\triangle UTS \sim$ _____

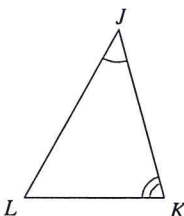
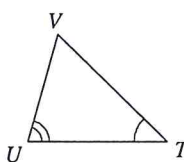
2)

 $\triangle CBA \sim$ _____

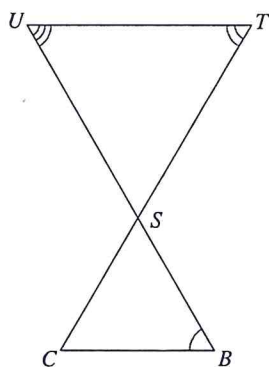
3)

 $\triangle VUT \sim$ _____

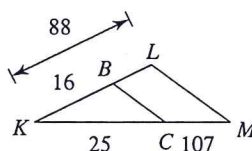
4)

 $\triangle JKL \sim$ _____

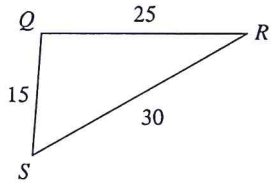
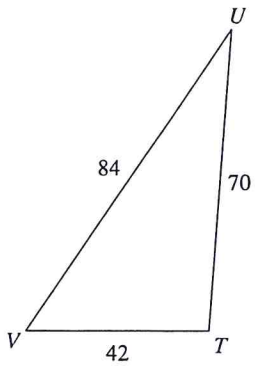
5)

 $\triangle STU \sim$ _____

6)

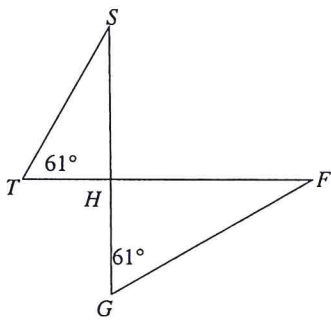
 $\triangle KLM \sim$ _____

7)



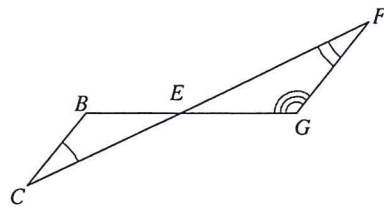
$\triangle TUV \sim \underline{\hspace{2cm}}$

9)



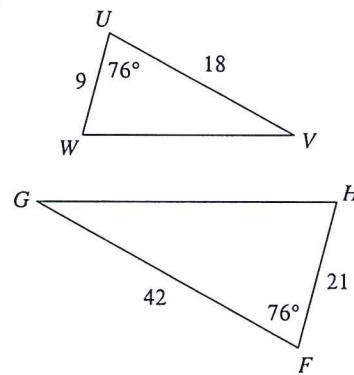
$\triangle HGF \sim \underline{\hspace{2cm}}$

8)



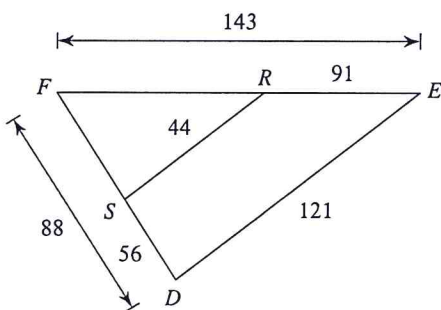
$\triangle EFG \sim \underline{\hspace{2cm}}$

10)



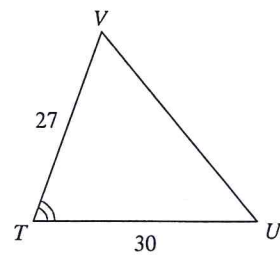
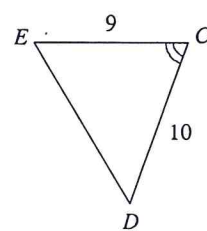
$\triangle FGH \sim \underline{\hspace{2cm}}$

11)



$\triangle FED \sim \underline{\hspace{2cm}}$

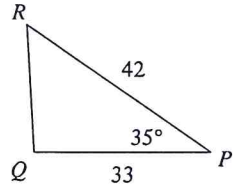
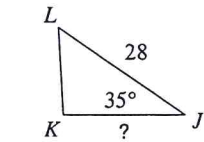
12)



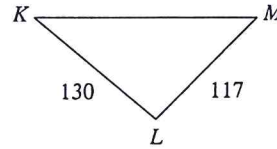
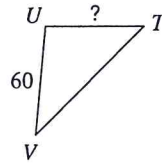
$\triangle TUV \sim \underline{\hspace{2cm}}$

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

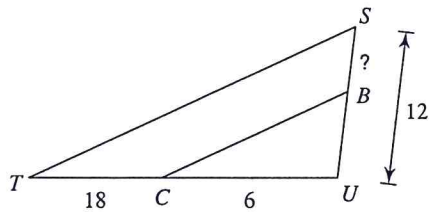
13)



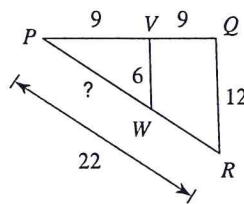
14)



15)

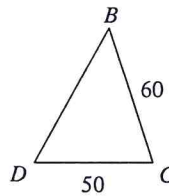
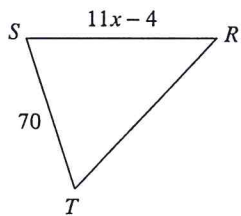


16)

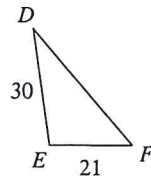
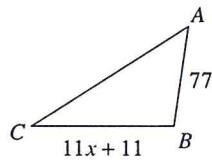


Solve for x . The triangles in each pair are similar.

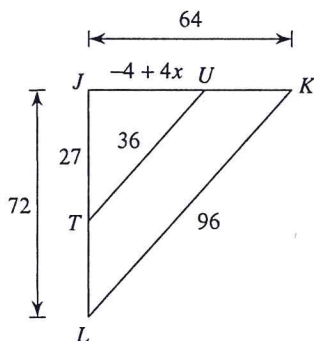
17)



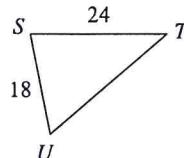
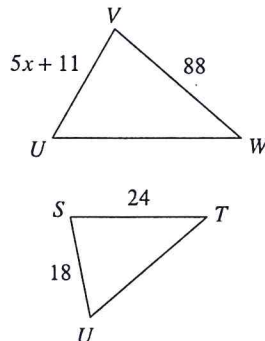
18)



19)



20)

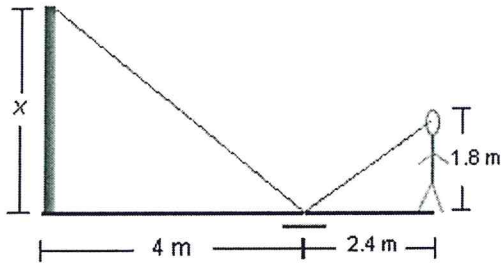


Sketch the diagram before solving.

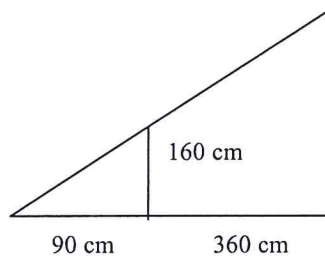
Name: _____

Similar Triangles Word Problems

1. A statue, honoring Kobe Bryant, can be found in Los Angeles near the Staples Center. Use the information below to determine the unknown height of the statue.



2. A tree 24 feet tall casts a shadow 12 feet long. Brad is 6 feet tall. How long is Brad's shadow?
3. Triangles EFG and QRS are similar. The length of the sides of EFG are 144, 128, and 112. The length of the smallest side of QRS is 280, what is the length of the longest side of QRS?
4. A 40-foot flagpole casts a 25-foot shadow. Find the shadow cast by a nearby building 200 feet tall.
5. A girl 160 cm tall, stands 360 cm from a lamp post at night. Her shadow from the light is 90 cm long. How high is the lamp post?



6. A tower casts a shadow 7 m long. A vertical stick casts a shadow 0.6 m long. If the stick is 1.2 m high, how high is the tower?