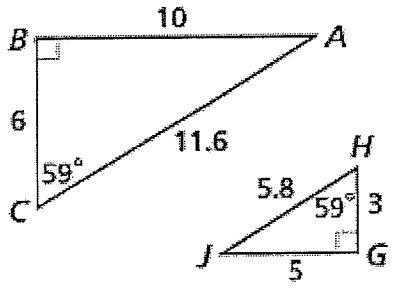
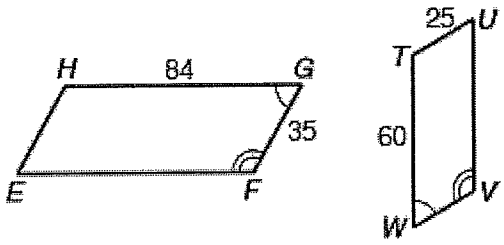
Module 11 Quiz Review (11.3-11.4) Name:_____

11.3: This section covers the definition of similar polygons as well as solving for missing sides and angles given a similarity statement.

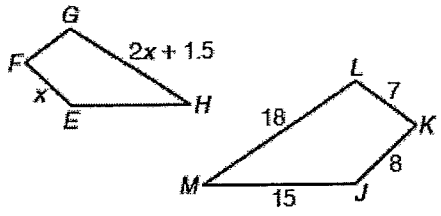
#1 Verify the figures shown below are similar by finding three pairs of ≅ corresponding angles and showing the ratios of corresponding sides are equal. Write a similarity statement and identify both scale factors.



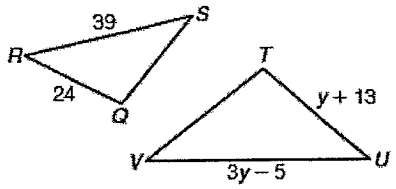
Hint: These are parallelograms



#2 *EFGH* ~ *JKLM*. What is the value of *x*?

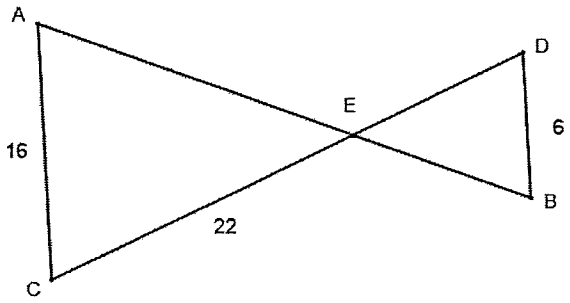


#3 $\triangle QRS \sim \triangle TUV$. Find the value of *y*.

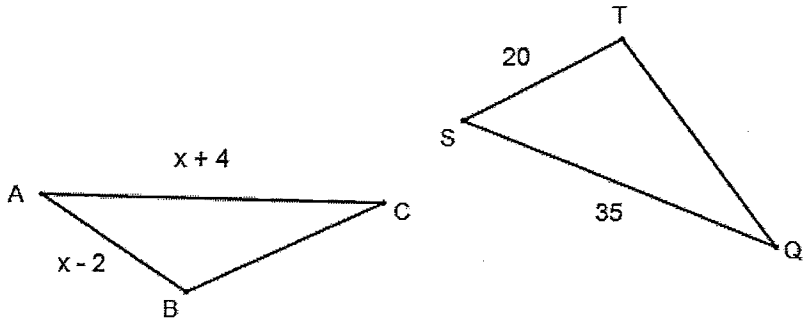


Assignment **over 11.3 Worksheet** Name:_____A

#1 $\Delta AEC \sim \Delta BED$. Find DE.

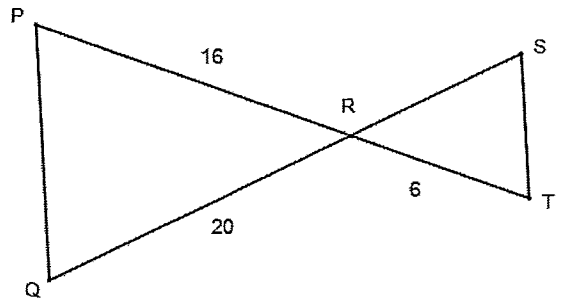


#2 $\Delta ABC \sim \Delta STQ$. Find AC. (Picture is not drawn to scale).

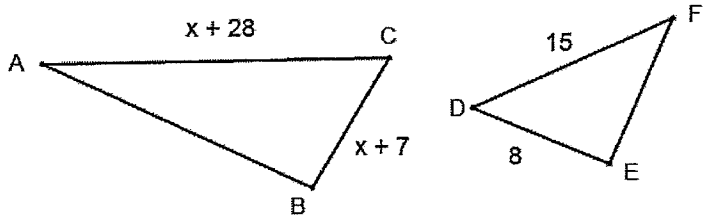


Assignment **over 11.3 Worksheet** Name:_____A'

#1 $\Delta PQR \sim \Delta TSR$. Find RS.



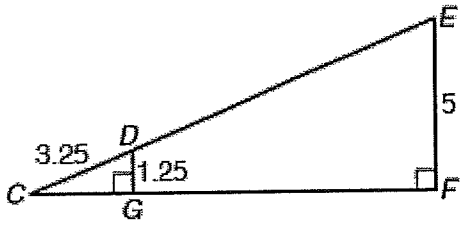
#2 $\Delta ABC \sim \Delta FED$. Find BC. (Picture is not drawn to scale).



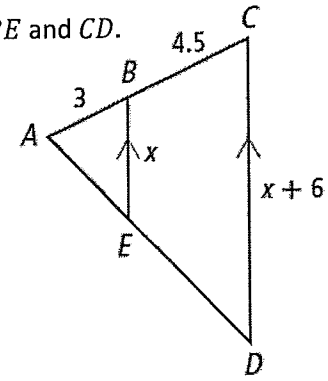
11.4: In this section, we proved triangles were similar using the AA Theorem. We then found missing sides of similar figures as in the problems on the previous page.

#4 Prove each pair of triangles are similar by finding a pair of congruent corresponding angles. Write a similarity statement, then find the requested lengths:

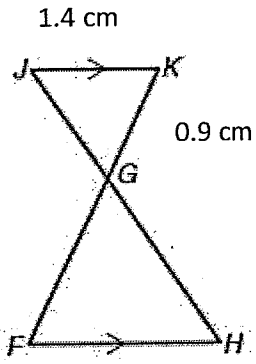
A. Find DE and CE.



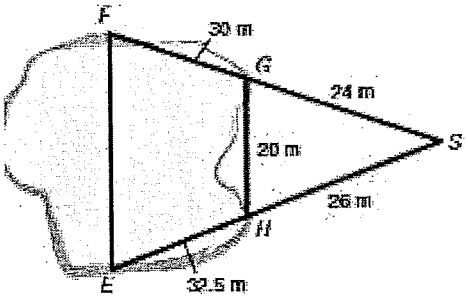
B. Find BE and CD.



C. Find FG.



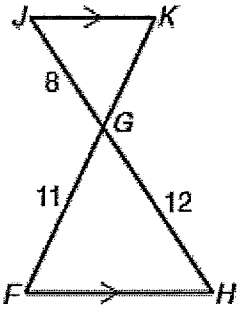
D. To measure the distance EF across the lake, a surveyor at S locates points E, F, G, and H as shown. What is EF?



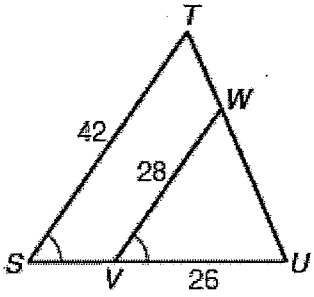
11.4: Proving Triangles Similar by AA Theorem Name:_____

For the following problems, verify the triangles are similar using the AA Postulate. Then, write a similarity statement, set up proportions, and solve the problem.

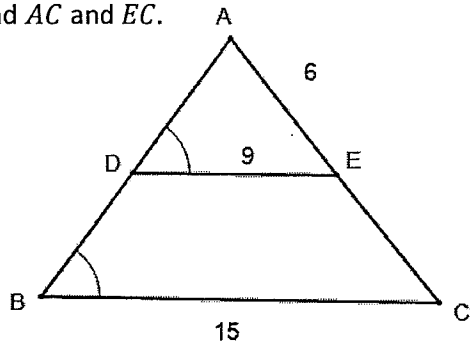
#1 Find GK.



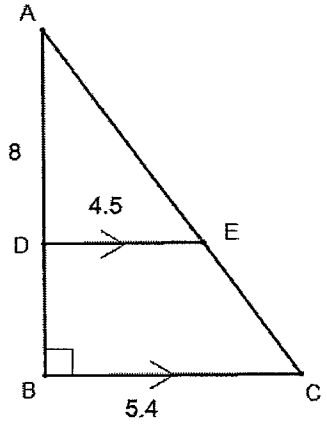
#2 Find US.



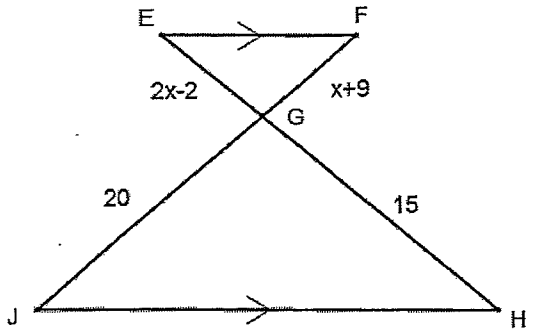
#3 Find AC and EC.



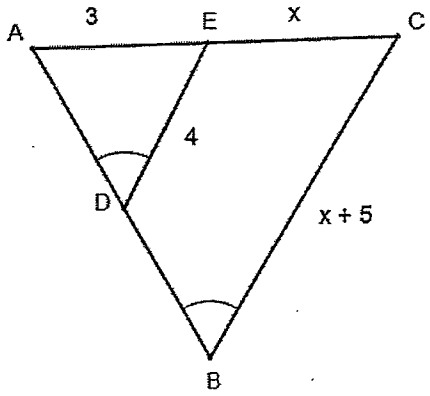
#4 Find AB.



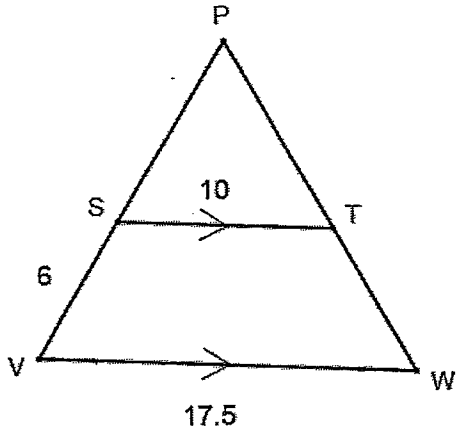
#5 Find FG



#6 Find BC.



#7 Find PS.



#8 Find ED, AE, and EB.