

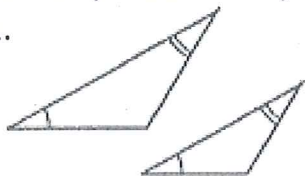
Name: Final answers only!

7.3 TRIANGLE SIMILARITY HOMEWORK

Show all work to get credit!

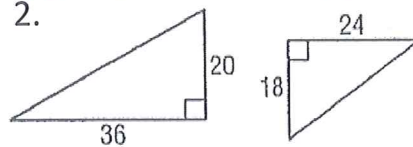
For #1-6, determine whether the pairs of triangles are similar. Justify your answer with a shortcut (if possible) and show any work if you need to find SLRs. No work = no credit

1.



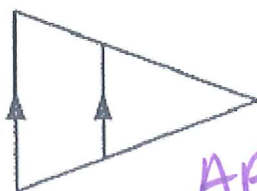
AA similarity

2.



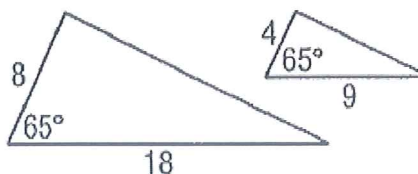
not similar

3.



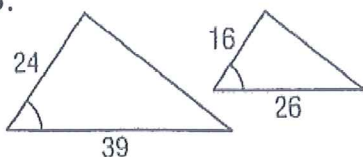
AA similarity

4.



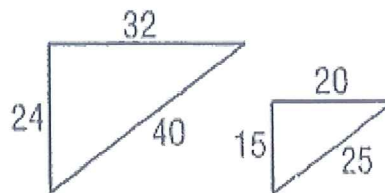
SAS similarity

5.



SAS similarity

6.



SSS similarity

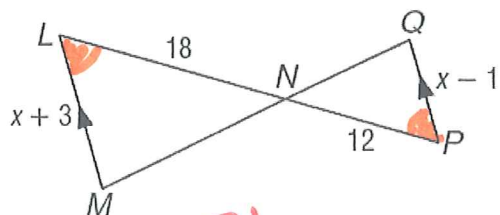
For # 7-10, do the following:

A. Write the similarity statement.

B. Find x .

C. Find the measure of the indicated side

7. \overline{LM} and \overline{QP}



a) $\triangle LNM \sim \triangle PNQ$

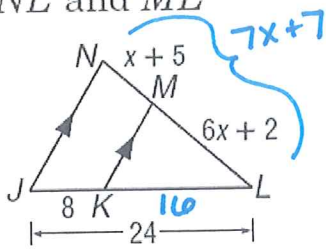
b) $x = 9$

c) $LM = 12$, $QP = 8$

Show work!

No work = no credit

8. \overline{NL} and \overline{ML}



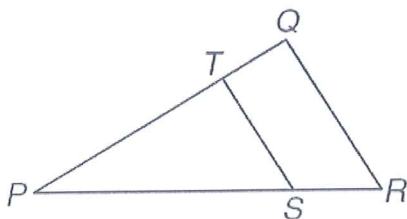
Show work!

a) $\triangle LMK \sim \triangle LNJ$

b) $x = 2$

c) $NL = 21$, $ML = 14$

9. If $\overline{TS} \parallel \overline{QR}$, $TS = 6$, $PS = x + 7$, $QR = 8$, and $SR = x - 1$, find PS and PR .



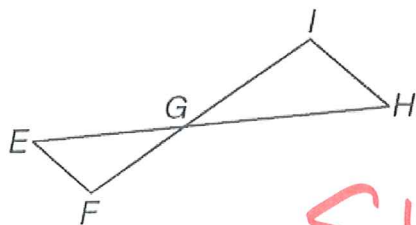
Show work!

a) $\triangle PQR \sim \triangle PTS$

b) $x = 5$

c) $PS = 12$, $PR = 16$

10. If $\overline{EF} \parallel \overline{HI}$, $EF = 3$, $EG = x + 1$, $HI = 4$, and $HG = x + 3$, find EG and HG .



Show work!

a) $\triangle EFG \sim \triangle HGI$

b) $x = 13$

c) $EG = 14$, $HG = 16$