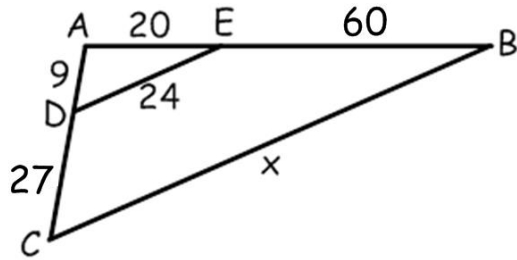
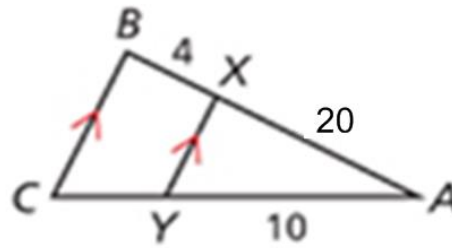


Standard: Similarity

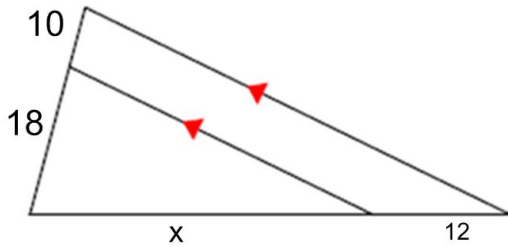
1. Find x



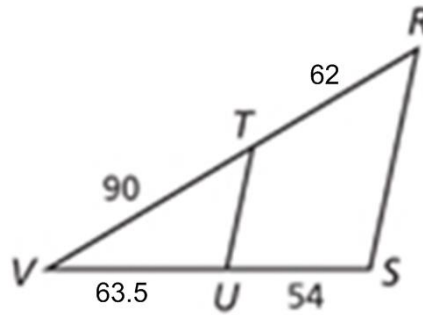
2. Find CY



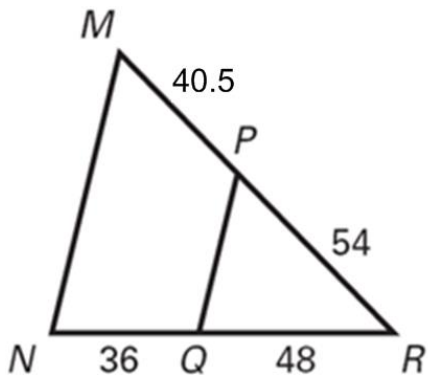
3. Find x



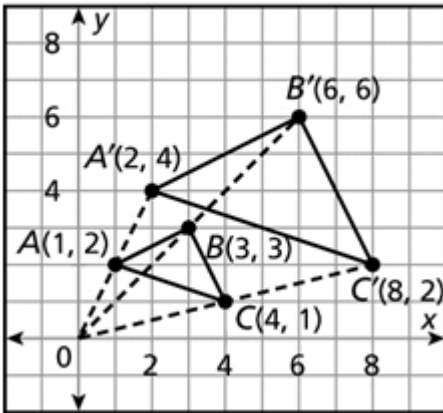
4. Is TU parallel to RS ? **SHOW YOUR WORK!**



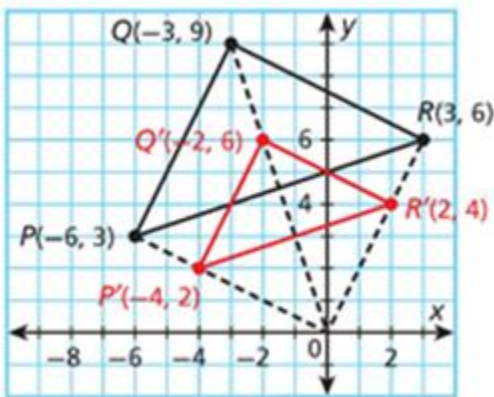
5. Is MN parallel to PQ ? **SHOW YOUR WORK!**



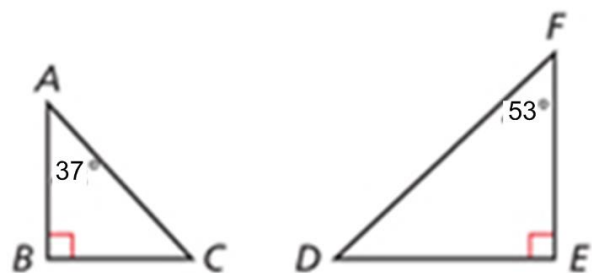
6. What is the scale factor from ABC to $A'B'C'$?



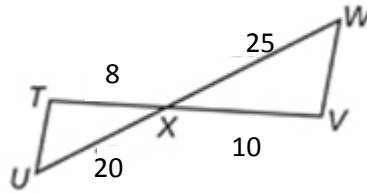
7. What is the scale factor from PQR to $P'Q'R'$?



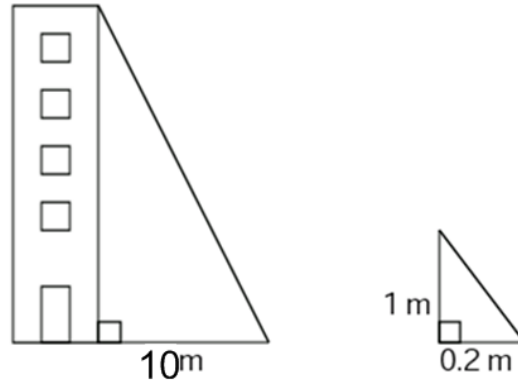
8. Are the two triangles similar? If so, by what method?



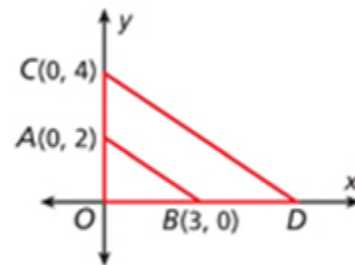
9. Verify the triangles are similar (AA, SSS or SAS) and write the similarity statement.



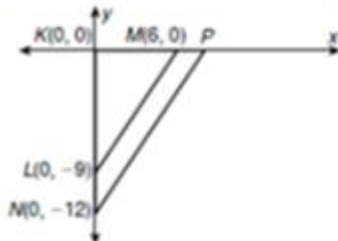
10. Assuming the two triangles are similar, find the tower's height from the given measurements below.



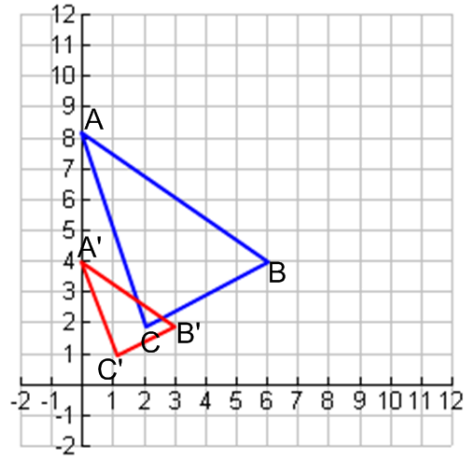
11. Given: $\triangle AOB \sim \triangle COD$
Find the scale factor from $\triangle COD$ to $\triangle AOB$ and find the coordinates for D.



12. Given that $\triangle LKM \sim \triangle NKP$, find the coordinates of P and the scale factor.

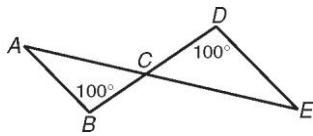


13. Figure $A'B'C'$ is a dilation of figure ABC . Find the scale factor from ABC to $A'B'C'$

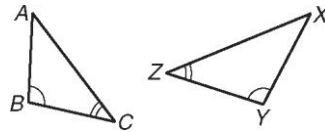


In # 14-17, Determine if each pair of triangles are similar. If they are not similar, WRITE NOT SIMILAR. If you determine they are similar, explain how you know (**show your work!**)

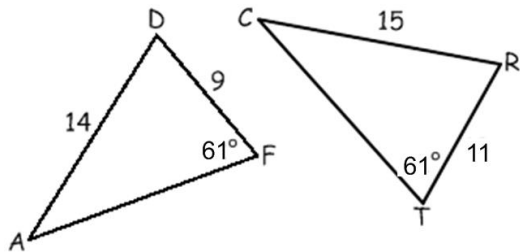
14.



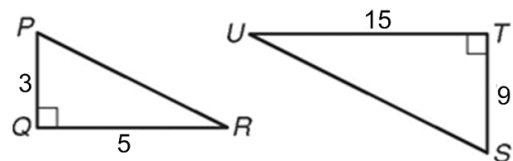
15.



16.

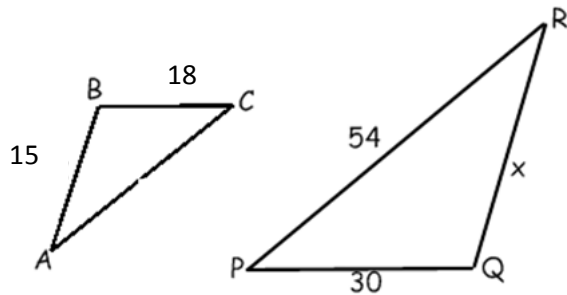


17.

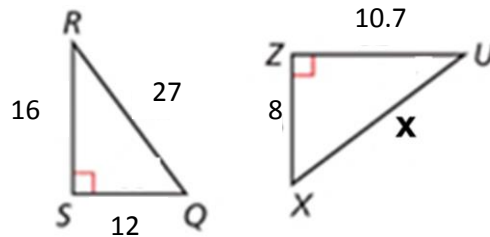


Find the value of x given that the triangles are similar.

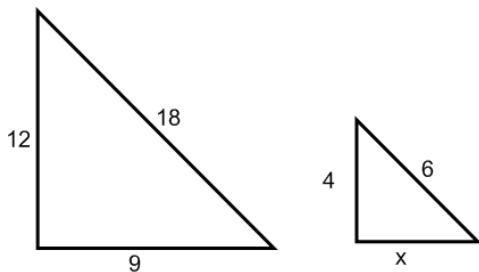
18. $\triangle ABC \sim \triangle RQP$



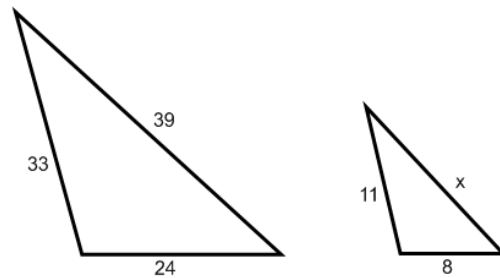
19. $\triangle SRQ \sim \triangle ZUX$



20.



21.



Directions: Use $\triangle ABC$, where L , M , and N are midpoints of the sides.

22) $LM \parallel$ _____

23) $\overline{AB} \parallel$ _____

24) If $AC = 30$, then $LN =$ _____

25) If $MN = 11$, then $AB =$ _____

26) If $NC = 5$, then $LM =$ _____

27) If $LM = 2x + 3$, and $BC = 6x + 2$, then $LM =$ _____

28) If $LN = 9$, $NM = 13$ and $LM = 20$, find the perimeter of $\triangle ABC$ _____

