

Complete the similar figures game in the google classroom. Take a screen shot of your score screen and post it in the assignment on the classroom
DO NOT SHARE IT WITH ME!!



Nov 15-8:51 AM

- Find the range of values for x in the triangle below.

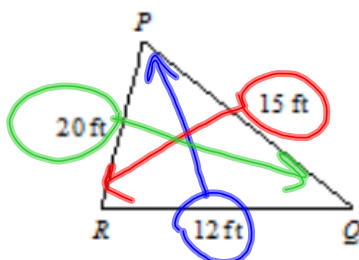


$$9 - 2 = 7$$

$$9 + 2 = 11$$

$$7 < x < 11$$

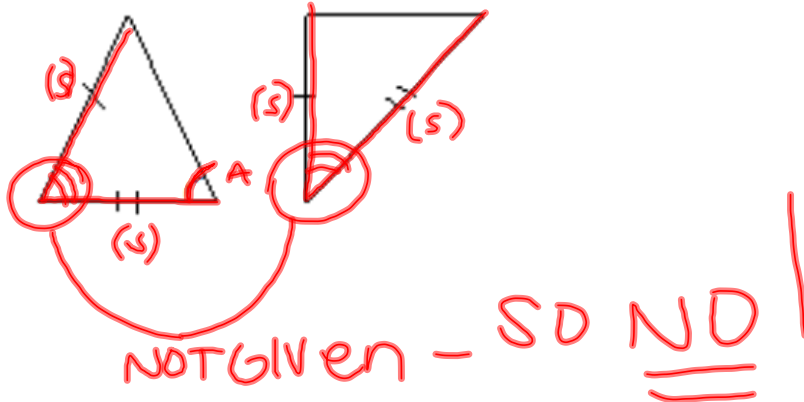
- Order the measures of the angles in triangle PQR from least to greatest.



$$\angle P, \angle R, \angle Q$$

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3. Determine whether the pair of triangles is congruent by the SAS Postulate.



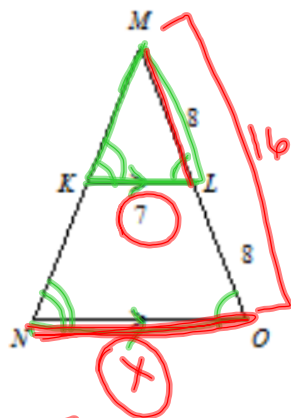
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4. What is the included side of $\triangle PQR$ that is between $\angle QRP$ and $\angle PQR$.



5. Show that the two triangles below are similar if $\overline{KL} \parallel \overline{NO}$. Then find NO .

AA
SSS
SAS



1. $\angle L \cong \angle O$

2. $\angle K \cong \angle N$

3.

$\triangle MKL \sim \triangle MNO$ by
AA.

~~$\frac{8}{16} = \frac{7}{x}$~~

~~$\frac{8}{8} = \frac{112}{8}$~~

$x = 14 = NO$

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6. Decide whether each set of side lengths could form a valid triangle: $(10, 8, 18)$, $(19, 9, 6)$, and $(16, 13, 4)$.

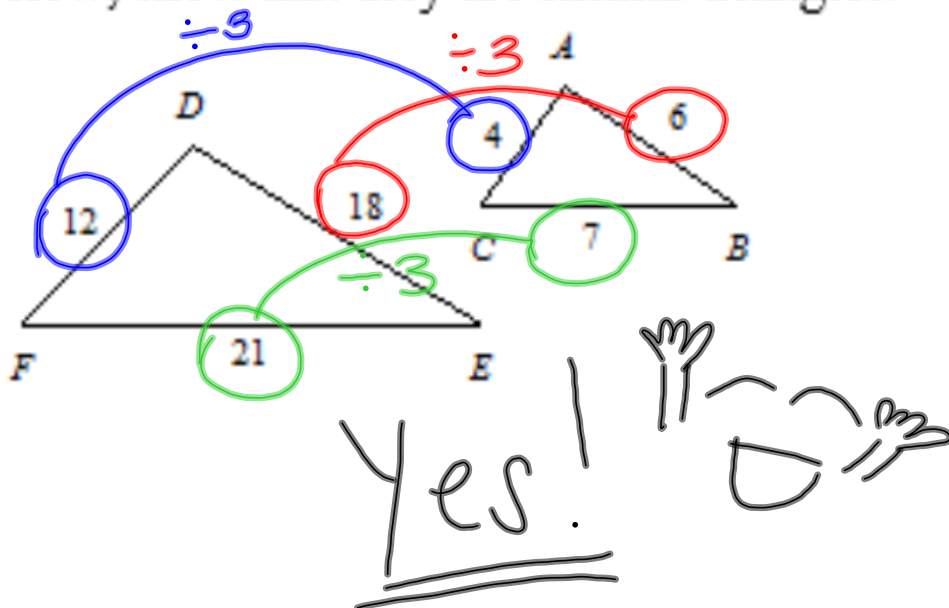
$18 > 18$
NO!

$19 < 15$
NO!

$16 < 17$
Yes!

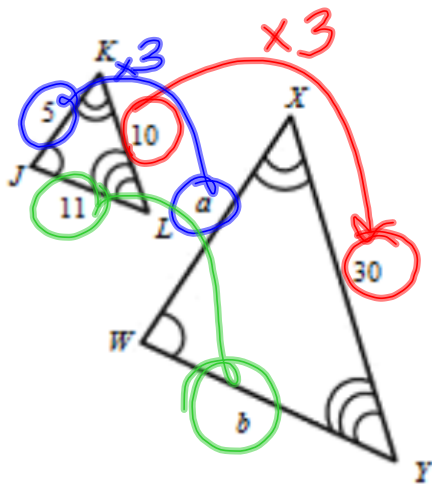
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7. Given the two triangles with values as shown below, show that they are similar triangles.



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8. Find the unknown side lengths in the two similar triangles below.

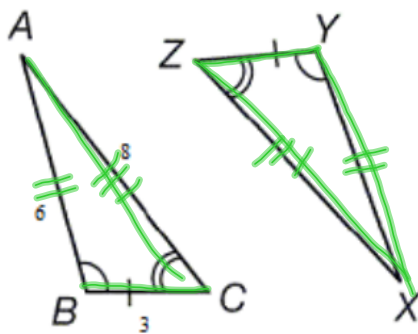


$$a = 5(3) = 15$$

$$b = 11(3) = 33$$

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9. Use ASA congruence to determine the measures of the sides of $\triangle XYZ$.

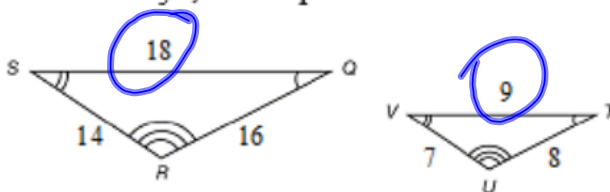


$$\overline{x_1} = 6$$

$$\overline{x_2} = 3$$

$$\overline{x_2} = 8$$

10. Write the ratio comparing VU to SR in three different ways, in simplest form.



$$18 \text{ to } 9$$

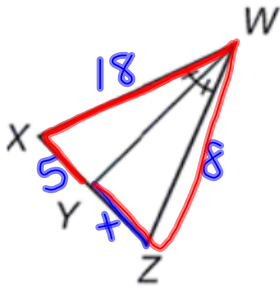
$$18 : 9$$

$$\frac{18}{9}$$

$$\boxed{\begin{array}{l} 2 \text{ to } 1 \\ 2 : 1 \\ \frac{2}{1} \end{array}}$$

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11. Using the diagram below, find YZ if $XW = 18$, $ZW = 8$, and $XY = 5$.

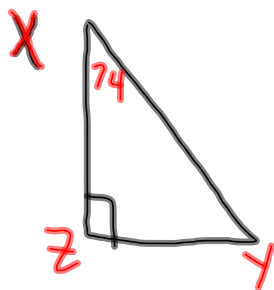


$$\frac{18}{5} = \frac{8}{x}$$

$$18x = \frac{40}{18}$$

$$x = 2.2$$

12. In the right triangle XYZ , $m\angle X = 74^\circ$ and the right angles is at vertex Z . Find the measure of $\angle Y$.

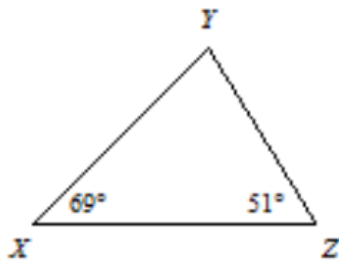


$$90 + 74 = 164$$

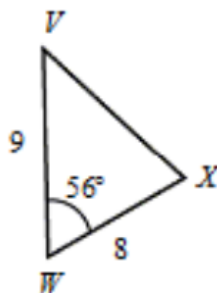
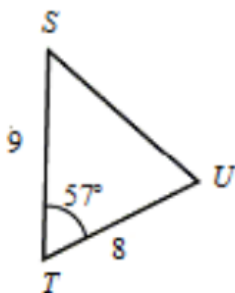
$$180 - 164 = 16^\circ$$

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13. Order the sides of $\triangle XYZ$ from least to greatest.



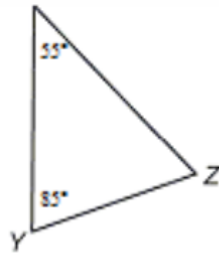
14. Compare the measures of \overline{SU} and \overline{VX} .



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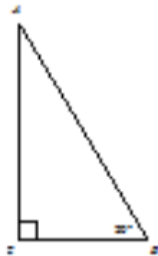
15. What is the included angle of \overrightarrow{TP} and \overrightarrow{TQ} ?

16. Order the lengths of $\triangle XYZ$ from least to greatest.



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17. Find the measure of $\angle A$ in $\triangle ABC$.

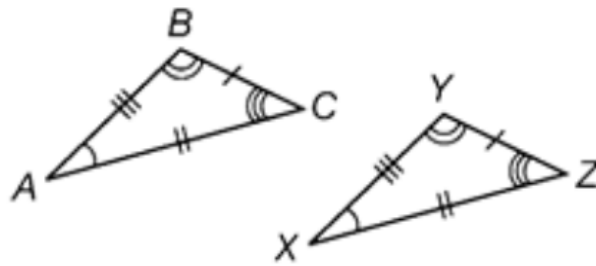


18. Decide whether each set of side lengths could form a valid triangle:

(4, 7, 13), (7, 18, 13), and (6, 14, 16).

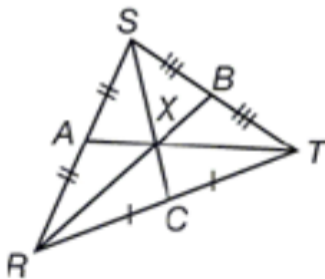
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19. Write a congruence statement for the two triangles below.

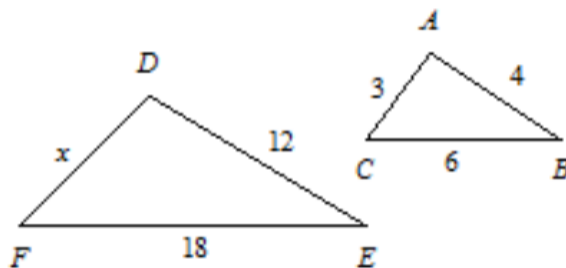


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20. In $\triangle RST$, $SC = 36$. Find CX .

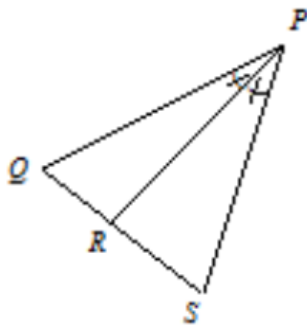


21. If $\triangle ABC \sim \triangle DEF$, find x .



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22. Using the diagram below, find QR if $PS = 18$, $RS = 9$, and $PQ = 17$.

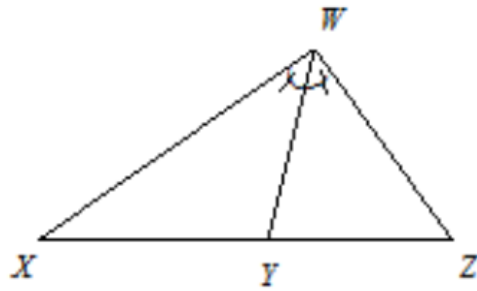


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23. In triangle XYZ , \overline{XA} is a median, and M is the centroid of the triangle. What is the length, in centimeters, of \overline{XM} if \overline{XA} measures 120 centimeters.

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24. Using the diagram, find XY if $WZ = 10.1$, $ZY = 5$, and $WX = 40.4$.



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