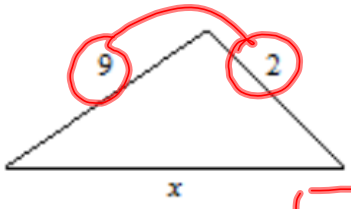
Complete the similar figures game in the google classroom. Take a screen shot of your score screen and post it in the assignment on the classroom DO NOT SHARE IT WITH ME!!

Nov 15-8:51 AM

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

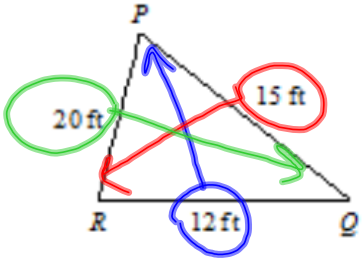


$9-2=7$

$9+2=11$

$7 < x < 11$

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



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

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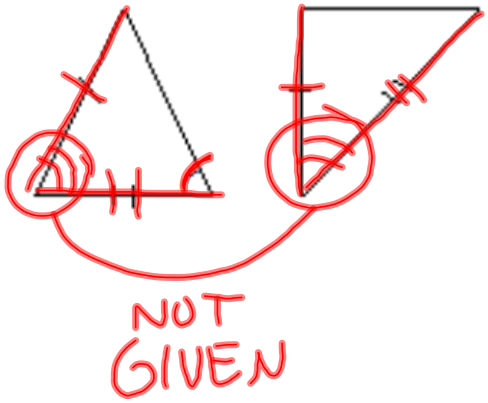
3. Determine whether the pair of triangles is congruent by the SAS Postulate.

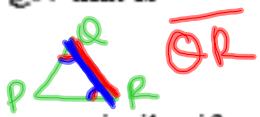


NOT GIVEN

NO!

Nov 15-7:39 AM

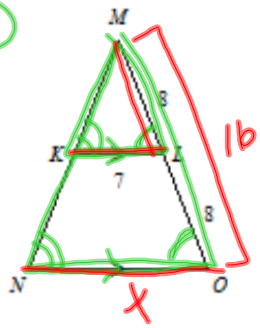
4. What is the included side of $\triangle PQR$ that is between $\angle QPR$ and $\angle PQR$.



$\overline{QR}$

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

AA
SAS
SSS



1. $\angle O \cong \angle L$
2. $\angle N \cong \angle K$
3. $\triangle MKL \sim \triangle MNO$ by AA.

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

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

$x = 14 = MO$

Nov 15-7:41 AM

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

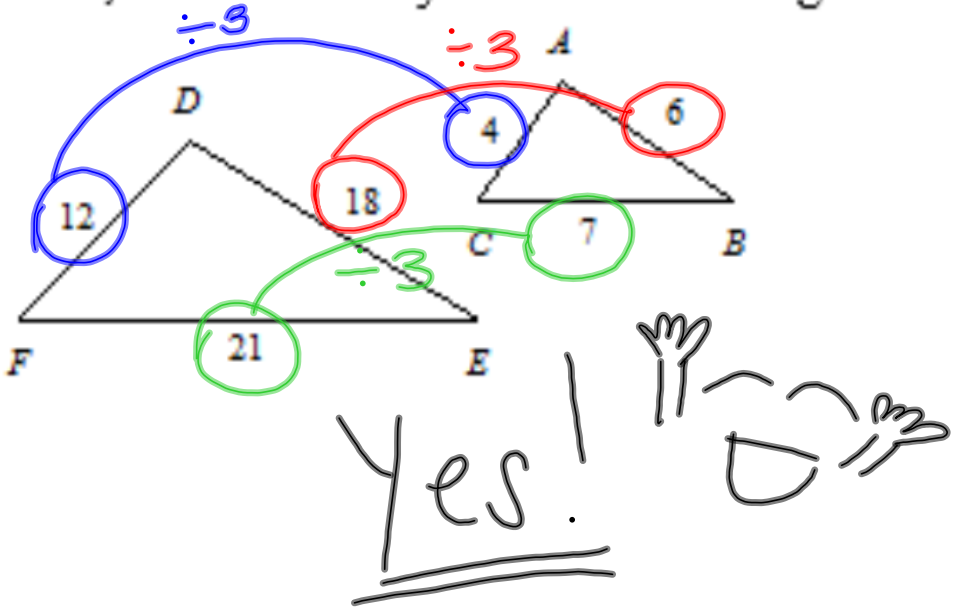
$18 > 18$ NO!

$19 < 15$ NO!

$16 < 17$ Yes!

Nov 15-7:41 AM

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



Yes!

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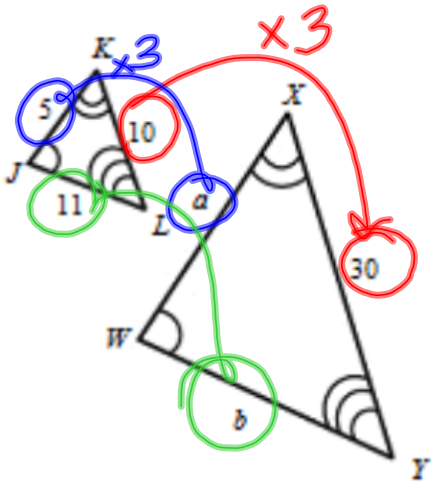
8. Find the unknown side lengths in the two similar triangles below.

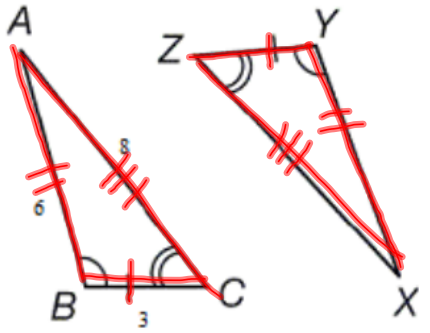


a = 5(3) = 15

b = 11(3) = 33

Nov 15-7:40 AM

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

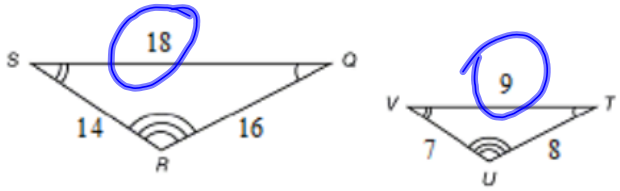


$\overline{XY} = 6$

$\overline{YZ} = 3$

$\overline{XZ} = 8$

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



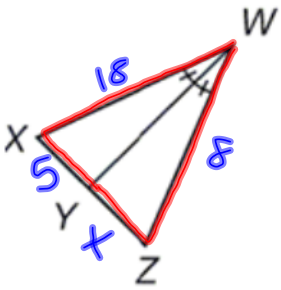
18 to 9 | 2 to 1

18 : 9 | 2 : 1

$\frac{18}{9}$ | $\frac{2}{1}$

Nov 15-7:40 AM

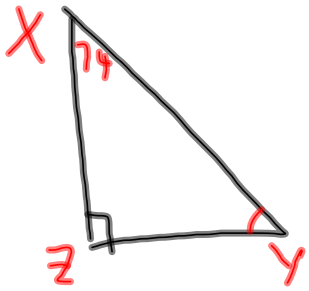
11. Using the diagram below, find YZ if $XW = 18$, $ZW = 8$, and $XY = 5$.



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

$18x = 40$

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



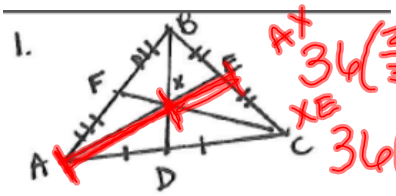
$90 + 74 = 164$

$180 - 164 = 16°$

Nov 15-7:41 AM

Welcome!!!! Put these 3 problems on the back of your part 1 study guide!!!

1. $\overline{AE} = 36$. Find $\overline{AX}$ & $\overline{XE}$.

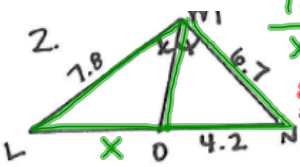


$AX: 36\left(\frac{2}{3}\right) = 24$

$XE: 36\left(\frac{1}{3}\right) = 12$

$159\left(\frac{2}{3}\right) = 106$

2. Find $\overline{LO}$.



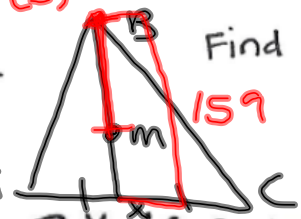
$\frac{7.8}{x} = \frac{6.7}{4.2}$

$32.8 = 6.7x$

$\frac{32.8}{6.7} = \frac{6.7x}{6.7}$

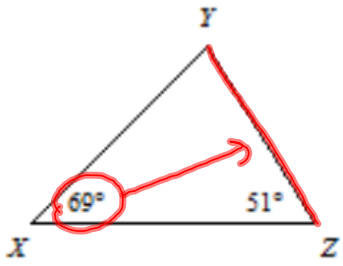
$x = 4.9$

3. In $\triangle ABC$, $\overline{BX}$ is a median, and M is a centroid. What is the length of $\overline{BM}$ if $\overline{BX}$ is 159cm?



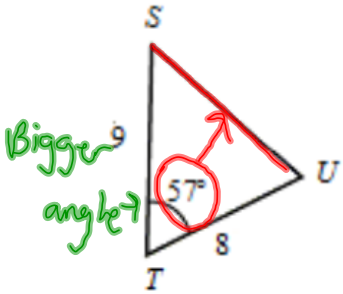
Nov 16-9:29 AM

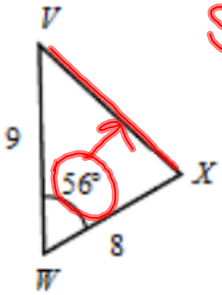
13. Order the sides of $\triangle XYZ$ from least to greatest.



*the bigger the angle, the bigger the side!

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



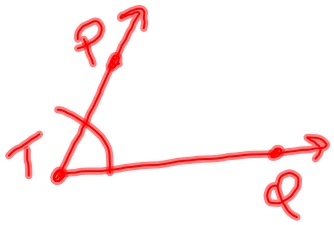


$\overline{SU} > \overline{VX}$

$\angle T > \angle W$

Nov 15-7:42 AM

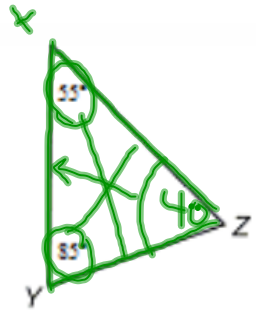
15. What is the included angle of $\overrightarrow{TP}$ and $\overrightarrow{TQ}$?



$\angle T$

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

55
85
180−140
40



$\overline{XY}, \overline{YZ}, \overline{XZ}$

Nov 15-7:45 AM

17. Find the measure of $\angle A$ in ΔABC.

90+20=110

180-110

70°

18. Decide whether each set of side lengths could form a valid triangle:
(4, 7, 13), (7, 18, 13), and (6, 14, 16).

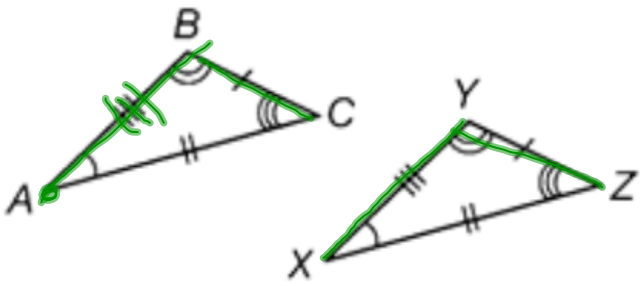
11>13 NO!

20>18 Yes!

20>16 Yes!

Nov 15-7:47 AM

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



$\Delta ABC \cong \Delta XYZ$

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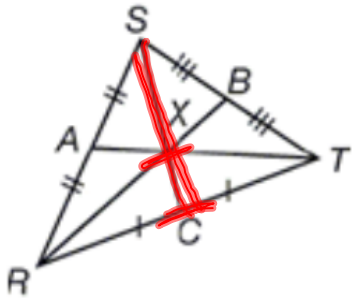
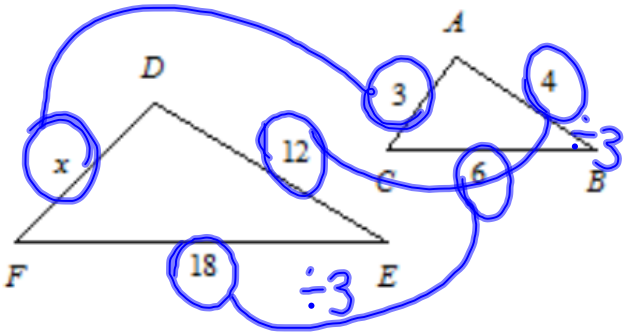
20. In $\triangle RST$, $SC = 36$. Find CX.



$36\left(\frac{1}{3}\right) = 12$

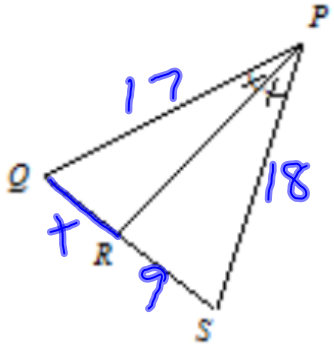
21. If $\triangle ABC \sim \triangle DEF$, find x.

$x = 9$



Nov 15-7:47 AM

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



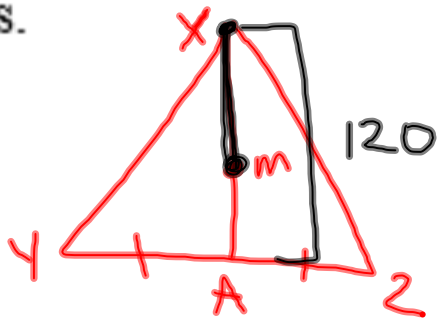
$\frac{17}{x} = \frac{18}{9}$

$\frac{153}{18} = \frac{18x}{18}$

$x = 8.5$

Nov 15-7:49 AM

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.



$120\left(\frac{2}{3}\right) = 80$

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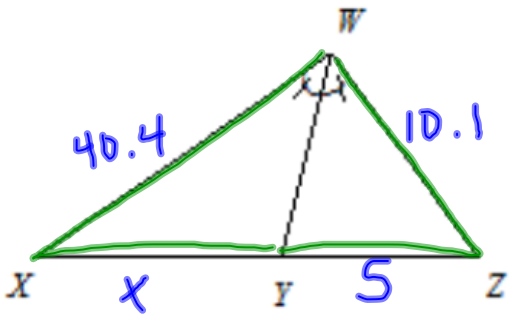
24. Using the diagram, find XY if $WZ = 10.1$, $ZY = 5$, and $WX = 40.4$.



$\frac{40.4}{x} = \frac{10.1}{5}$

$\frac{202}{10.1} = \frac{10.1x}{10.1}$

$20 = x$

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