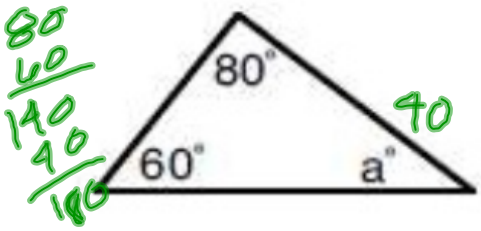
Welcome!! Please grab your ISN and warmups and have a seat!

1).



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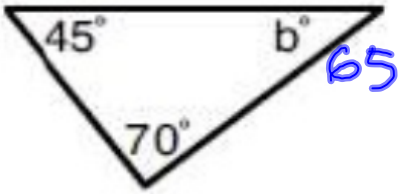

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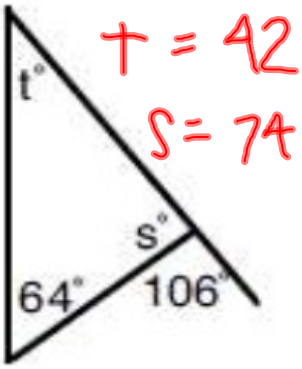

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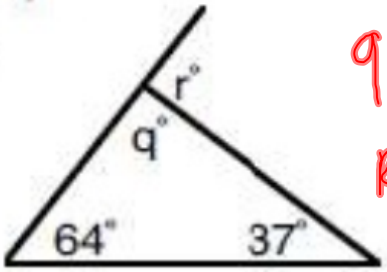
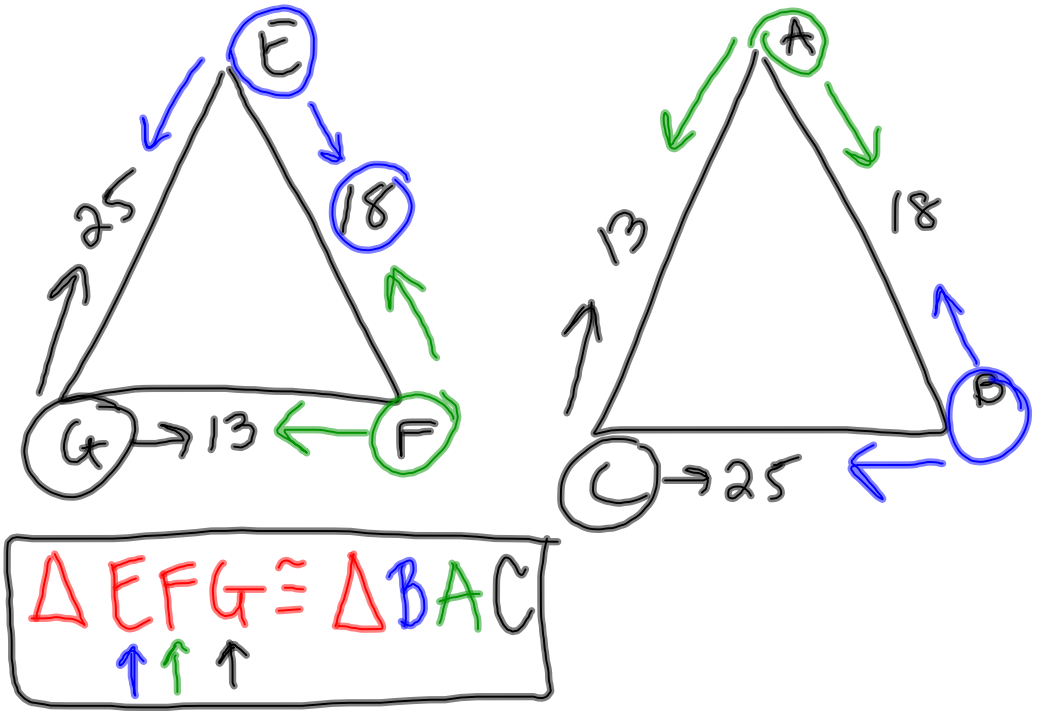


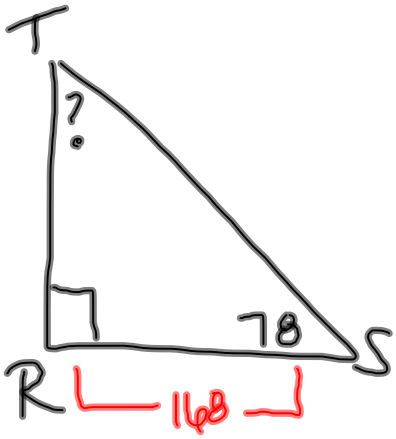
Oct 5-7:55 AM

1. For ΔEFG, $EF = 18$, $FG = 13$, $EG = 25$. For ΔABC, $AB = 18$, $AC = 13$, $BC = 25$. Write the congruency statement for the triangles.



Oct 5-8:06 AM

2. In the right triangle RST, $m\angle S = 78°$ and the right angle is at vertex R. Find the measure of $\angle T$.

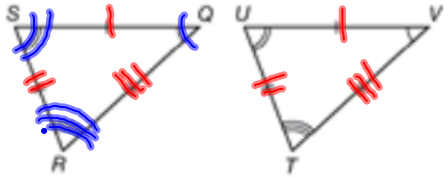


$m\angle T = 12°$

$180 - 168 = 12$

Oct 5-8:07 AM

3. Identify the congruent sides and angles of the two triangles below and write six congruency statements.



$\angle Q \cong \angle V$

$\angle R \cong \angle T$

$\angle S \cong \angle U$

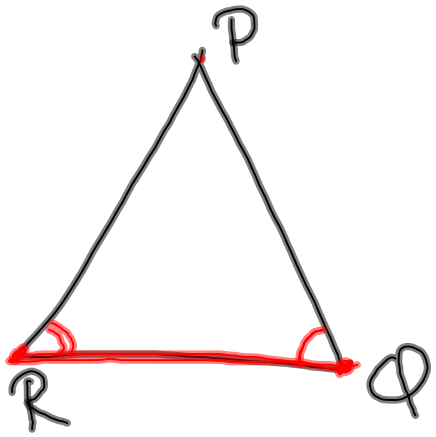
$\overline{QR} \cong \overline{VT}$

$\overline{RS} \cong \overline{UT}$

$\overline{SQ} \cong \overline{UV}$

Oct 5-8:07 AM

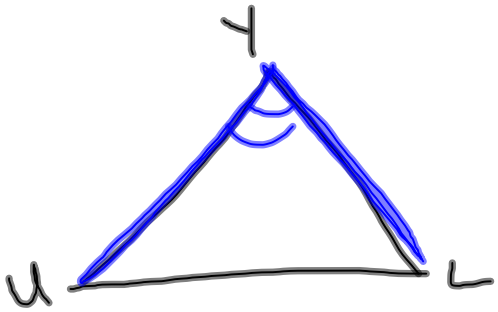
4. What is the included side of $\triangle PQR$ that is between $\angle QRP$ and $\angle PQR$.



$\overline{RQ}$

Oct 5-8:08 AM

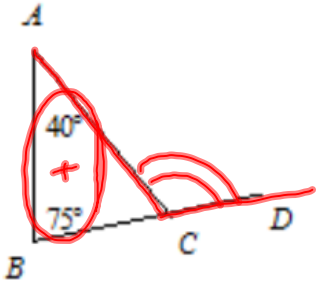
5. What is the included angle of $\overrightarrow{YU}$ and $\overrightarrow{YL}$?



$\angle Y$

Oct 5-8:08 AM

6. For ΔABC, determine the measure of $\angle ACD$.

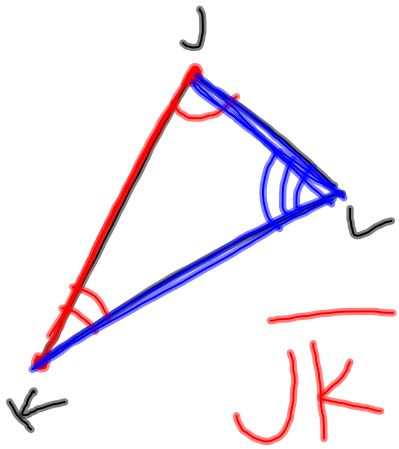


$\angle ACD = 40 + 75$

$\angle ACD = 115°$

Oct 5-8:09 AM

7. What is the included side of $\angle J$ and $\angle K$ in the triangle below? What is the included angle of $\overline{JL}$ and $\overline{KL}$?

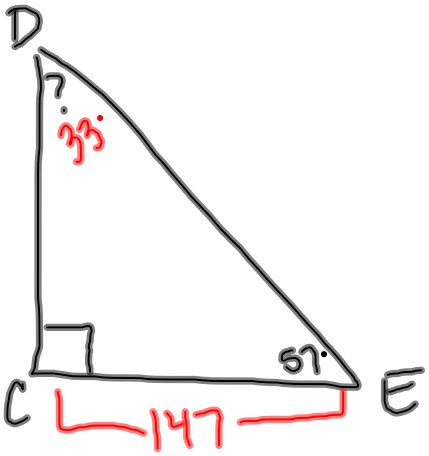


$\angle L$ included angle of $\overline{JL}$ & $\overline{KL}$

$\overline{JK}$ included side of $\angle J$ & $\angle K$

Oct 5-8:09 AM

8. In the right triangle CDE, $\angle E$ measures $57°$ and the right angle is at vertex C. Find $m\angle D$.



180
- 147
33

$\angle D = 33°$

Oct 5-8:09 AM

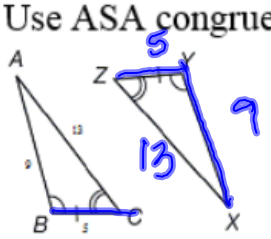
9. Find the measure of $\angle A$ in ΔABC.

$\angle A = 180 - 150$

$\angle A = 30°$

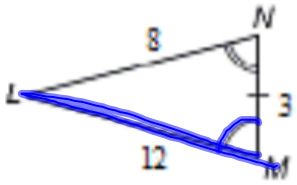
Oct 5-8:10 AM

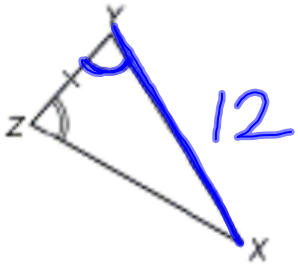
10. Use ASA congruence to determine the measures of the sides of ΔXYZ.



Oct 5-8:10 AM

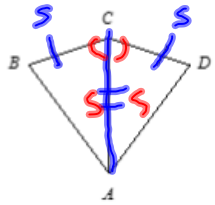
11. What is the measure of $\overline{XY}$?





Oct 5-8:11 AM

12. What additional information do you need to prove $\Delta ABC \cong \Delta ADC$ by the SAS Postulate?

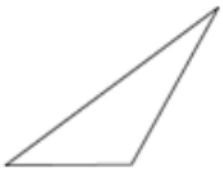


S A S
?
BC CD
AC AC

$\angle BCA \cong \angle DCA$

Oct 5-8:11 AM

13. Classify the triangle according to its sides and angles.

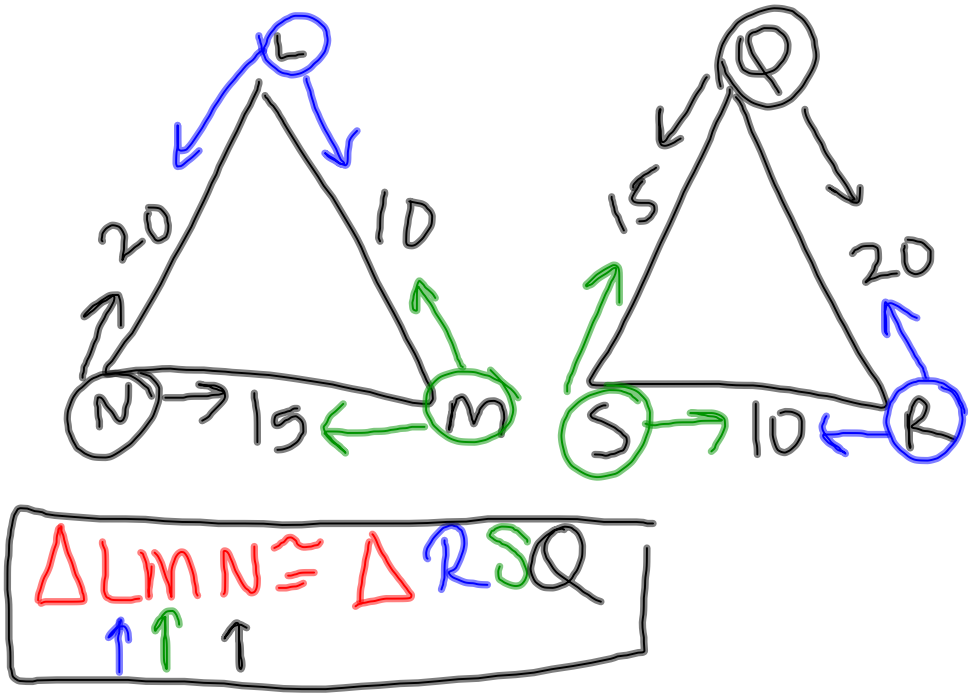


Obtuse

Scalene

Oct 5-8:12 AM

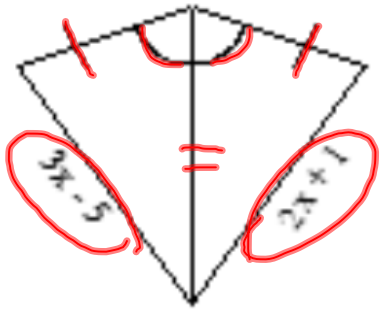
14. In ΔLMN, $LM = 10$, $MN = 15$, and $LN = 20$. In ΔQRS, $QR = 20$, $RS = 10$, and $QS = 15$. Write the congruency statement for the triangles.



$\Delta LMN \cong \Delta RSQ$

Oct 5-8:12 AM

15. Find the value of x.



$3x - 5 = 2x + 1$

$+5 \quad +5$

$3x = 2x + 6$

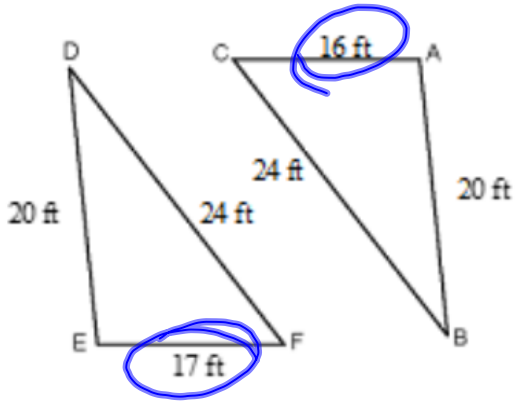
$-2x \quad -2x$

$x = 6$

$x = 6$

Oct 5-8:12 AM

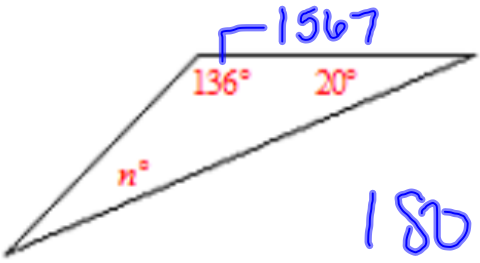
16. Determine whether the triangles are congruent.



NO! not ≅

Oct 5-8:18 AM

17. Find n in the obtuse triangle.

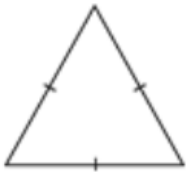


$180 - 156 = 24°$

$n = 24°$

Oct 5-8:18 AM

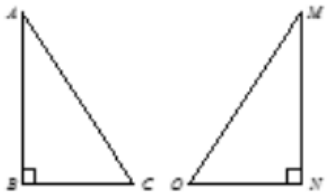
18. Classify the triangle according to its sides and angles.



acute
equilateral

Oct 5-8:18 AM

19. **Given**: $\Delta ABC \cong \Delta MNO$
Identify all pairs of congruent corresponding parts.

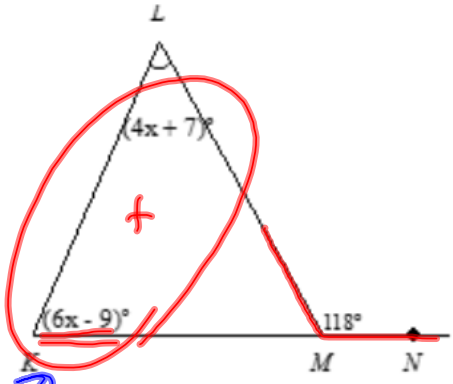


$\angle A \cong \angle M$
$\angle B \cong \angle N$
$\angle C \cong \angle O$

$\overline{AB} \cong \overline{MN}$
$\overline{BC} \cong \overline{NO}$
$\overline{CA} \cong \overline{OM}$

Oct 5-8:19 AM

20. Find $m\angle K$.



$4x+7+6x-9=118$

$10x-2=118$

$+2 \quad +2$

$\frac{10x}{10} = \frac{120}{10}$

$x=12$

$m\angle K = 6x-9$

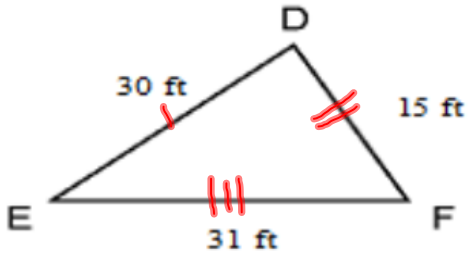
$m\angle K = 6(12)-9$

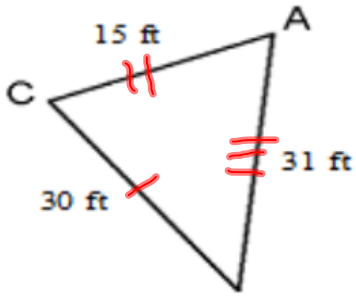
$m\angle K = 72-9$

$m\angle K = 63°$

Oct 5-8:19 AM

21. Determine whether the triangles are congruent.

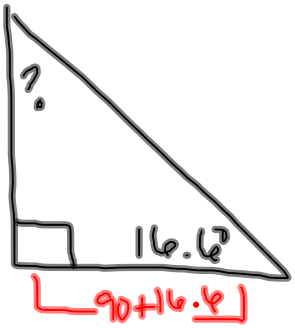




Yes! all sides $\cong$

Oct 5-8:19 AM

22. One of the acute angles in a right triangle has a measure of 16.6°. What is the measure of the other acute angle?



180 − 106.6

73.4°

Oct 5-8:19 AM

Oct 5-3:57 PM