What would you get?

+ /39

Name Key Period ____

Chapter 5 Quiz Practice

Classify each triangle by its **side measures** (scalene, equilateral, isosceles).
Then, classify each triangle by its **angle measure** (acute, obtuse, right, equiangular).

1) ΔQNM Classified by sides: SCALENE (+1)

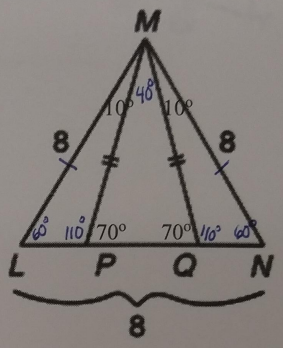
Classified by angles: OBTUSE (+1)

2) ΔMPQ Classified by sides: ISOSCELES (+1)

Classified by angles: ACUTE (+1)

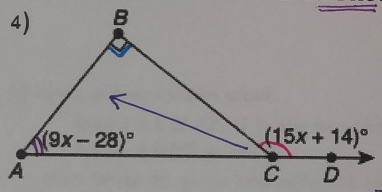
3) ΔNLM Classified by sides: EQUILATERAL (+1)

Classified by angles: EQUILATERAL (+1)



EXTERIOR ANGLES: Solve for $m\angle BAC$. Show ALL work.

4)



$15x+14 = 90 + 9x - 28$ ← (+1)

$15x+14 = 62+9x$

$6x+14 = 62$

$6x = 48$

$x = 8$ ← (+1)

$9(8)-28$

$= 72-28$

$= 44°$ ← (+2)

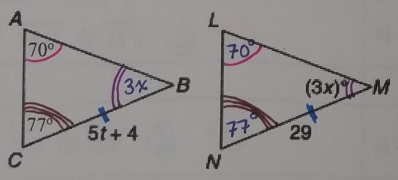
ANY WORK (+1)

m∠BAC = 44°

TRIANGLE SUM THEOREM and CONGRUENT SIDES:

$\Delta ABC \cong \Delta LMN$. Solve for the values of x and t

5)



$70+77+3x = 180$ ← (+1)

$147+3x = 180$

$3x = 33$

$x = 11$ ← (+2)

→ $5t+4 = 29$ ← (+1)

$5t = 25$

$t = 5$ ← (+2)

ANY WORK (+1)

ANY WORK (+1)

x = 11

t = 5

CONGRUENT Δs: Given $\Delta MNO \cong \Delta GHI$, complete each congruence statement.
(*Reminder*: letter order matters!)

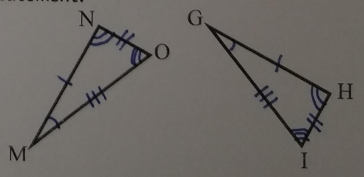
6)

a. $\angle N \cong \angle H$ (+1)

b. $\angle G \cong \angle M$ (+1)

c. $\overline{MO} \cong \overline{GI}$ (or $\overline{IG}$) (+1)

d. $\overline{GH} \cong \overline{MN}$ (or $\overline{NM}$) (+1)



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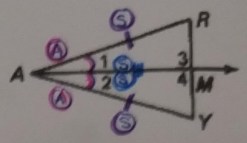
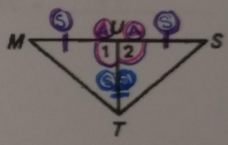
SAS ≅ Two Column Proofs:

7) Write a two-column proof.
Given: $\angle 1 \cong \angle 2$, $\overline{AR} \cong \overline{AY}$
Prove: $\Delta RAM \cong \Delta YAM$
Hint: Write all given information in step 1, there are 3 steps total



Statements	Reasons
1) $\angle 1 \cong \angle 2$ (A), $\overline{AR} \cong \overline{AY}$ (S)] +2	1) GIVEN +1
2) $\overline{AM} \cong \overline{AM}$ (S) +1	2) REFL. POC +1
3) $\Delta RAM \cong \Delta YAM$ +1	3) SAS ≅ +1

8) Write a two-column proof.
Given: $\angle 1 \cong \angle 2$, U is the midpoint of $\overline{MS}$
Prove: $\Delta MUT \cong \Delta SUT$
Hint: Write all given information in step 1, there are 4 steps total



Statements	Reasons
1) $\angle 1 \cong \angle 2$ (A), U IS THE MIDPOINT OF $\overline{MS}$] +2	1) GIVEN +1
2) $\overline{MU} \cong \overline{US}$ (S) +1	2) DEF. MIDPOINT +1
3) $\overline{UT} \cong \overline{UT}$ (S) +1	3) REFL. POC +1
4) $\Delta MUT \cong \Delta SUT$ +1	4) SAS ≅ +1

OK IF THESE TWO LINES ARE SWITCHED

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