Name: _____

Date: _____ Period: _____

SECONDARY MATH II
Module 5 Study Guide: Geometric Figures

<u>**Directions**</u>**: Show ALL work.**

Using the proper symbolic notation, translate the statement into symbols AND draw a picture that is labeled correctly.

Statement	Symbolic Notation	Picture
1. Line AB is parallel to line CD.	1.	1.
2. Line segment MN is perpendicular to line segment PQ.	2.	2.
3. Ray RT bisects angle QRS.	3.	3.
4. Point V bisects line segment WX.	4.	4.
5. Triangle ABC is congruent to triangle DEF.	5.	5.
6. The measure of angle C is equal to 52°.	6.	6.

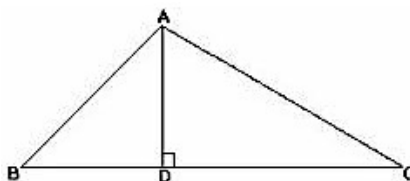**Match each word/concept on the left with the picture depicting that word/concept that word/concept on the right.**
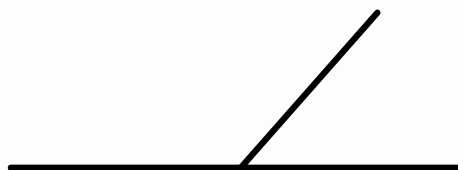
_____7. Linear Pair
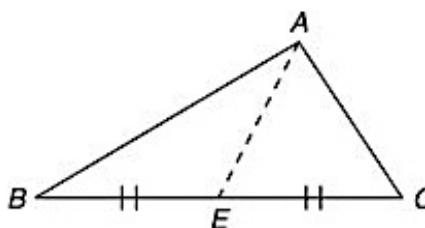
a.

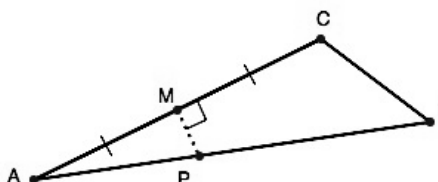$180 - x$ x
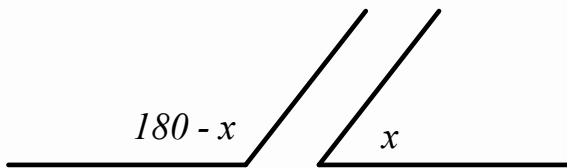
_____8. Supplementary Angles

b.

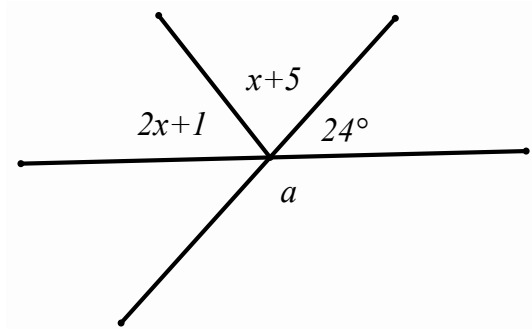_____9. Altitude

c.

_____10. Median
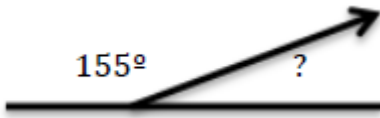
d.

_____11. Perpendicular bisector of a side

e.

12. Find the measure of a in the diagram below

$x+5$
$2x+1$ $24°$
a

13. Find the measure of all of the angles for the quadrilateral below.

$$B \quad 25x+15$$
$$A$$
$$5x+50$$
$$C \quad -(98 - 47x)$$
$$D \quad 25x - 15$$
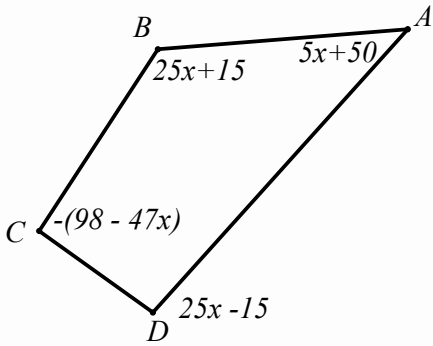
14. Find the measure of the missing angle.

155º   ?

15. Given $m\angle ABC = 90°$, what does x equal?

C

A

x   2x

B
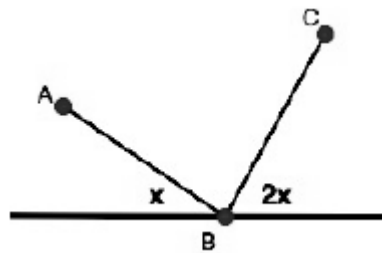
16. Given the following sides, sketch the triangles, write a congruence statement, and decide what triangle congruence pattern (ASA, SSS, or SAS) allows you to say those triangles are congruent.

$$\overline{CY} \cong \overline{RP}, \overline{EY} \cong \overline{BP}, \angle Y \cong \angle P$$

Congruence Statement:

_____

Congruence Pattern:

_____

Triangles:

List each pair of angles as congruent or supplementary, given that lines p and q are parallel.
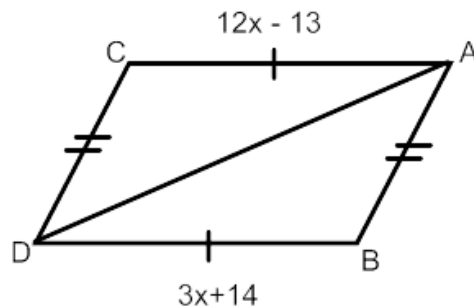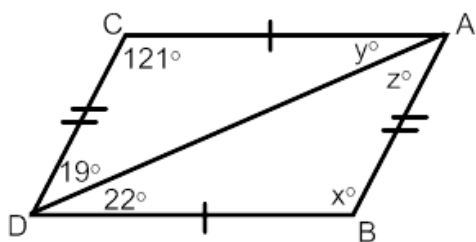
17. $\angle 1$ and $\angle 2$

18. $\angle 1$ and $\angle 4$

19. $\angle 4$ and $\angle 6$

20. $\angle 2$ and $\angle 8$

21. Determine what x, y, and z equal.

22. Determine what x equals.

23. Solve for x.

24. Label each missing angle with the correct angle measure.