Special Parallelograms

Worksheet

Name_____

For 1-8, complete the following charts by putting checks in the boxes that are true.

	4 Sides	Opp. Sides ||	Opp. Sides ≅	All Sides ≅	Opp. Angles ≅	All Angles ≅
1. Parallelogram						
2. Rectangle						
3. Rhombus						
4. Square						

The diagonals	bisect each other	are congruent	bisect opposite angles	are perpendicular
5. Parallelogram				
6. Rectangle				
7. Rhombus				
8. Square				

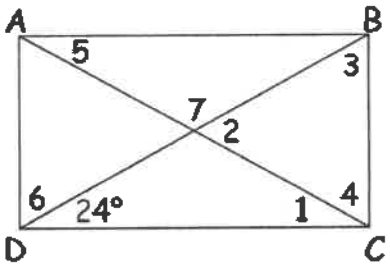
For 9-17, determine if the statement is true or false.

_____9. All quadrilaterals are parallelograms.
_____10. All parallelograms are quadrilaterals.
_____11. A square is a parallelogram.
_____12. A parallelogram with a right angle is a square.
_____13. All rectangles are parallelograms.
_____14. All rhombuses are squares.
_____15. All squares are rectangles.
_____16. A parallelogram with four congruent sides is a square.
_____17. A parallelogram with perpendicular diagonals is a square.

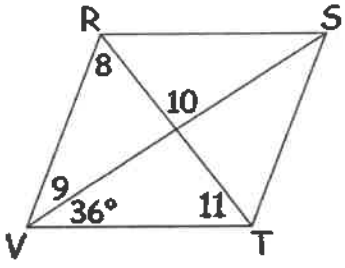
For 18-21, find the measure of the numbered angles in the figures.

m∠1 = _____
m∠2 = _____
m∠3 = _____
m∠4 = _____
m∠5 = _____
m∠6 = _____
m∠7 = _____
m∠8 = _____
m∠9 = _____
m∠10 = _____
m∠11 = _____
m∠12 = _____

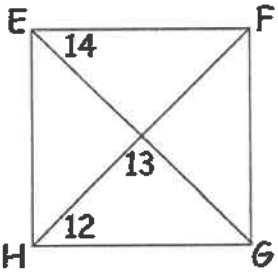
18. *ABCD is rectangle*



19. RSTV is a *rhombus*



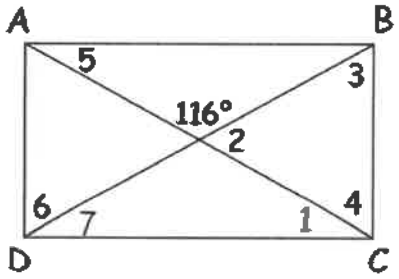
20. EFGH is a *square*



m∠13 = _____
m∠14 = _____

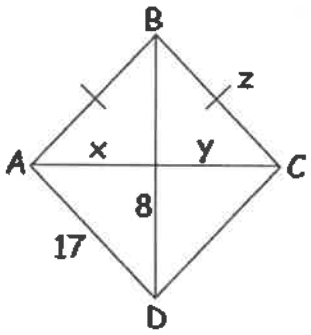
21. *ABCD is a rectangle*

m∠1 = _____
m∠2 = _____
m∠3 = _____
m∠4 = _____
m∠5 = _____
m∠6 = _____
m∠7 = _____

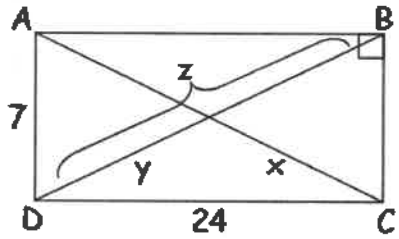


For 22-23, for the following parallelograms,(a) choose the best name, (b) find the value of each variable.

22.



23.



24. In quadrilateral MATH, $\overline{MT}$ and $\overline{AH}$ bisect each other at R and $\overline{MR} \cong \overline{HR}$.
MATH must be a
I. parallelogram
II. rectangle
III. square

A. I only B. II only C. I and II D. II and III E. I, II and III

25. *Cindy is making the design shown below with silver wire. It consists of a rectangle and its two diagonals. How much wire does she need to make this design?*