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.

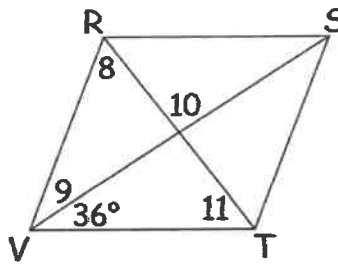_____17. A parallelogram with perpendicular diagonals is a square.

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 = _____
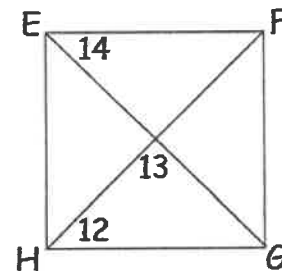
18. ABCD is rectangle
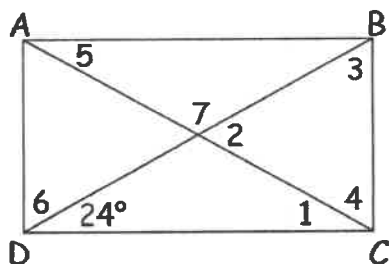
19. RSTV is a rhombus

20. EFGH is a square

m∠13 = _____
m∠14 = _____

21. ABCD is a *rectangle*

m∠1 = _____
m∠2 = _____
m∠3 = _____
m∠4 = _____
m∠5 = _____
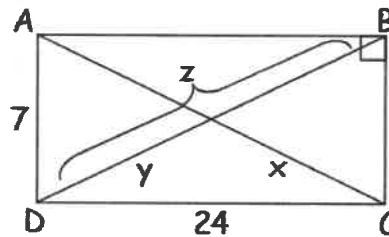m∠6 = _____
m∠7 = _____
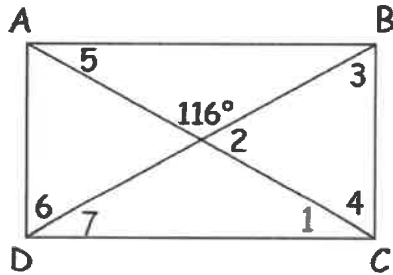
For 22-23, for the following parallelograms,(a) choose the best name, (b) find the value of each variable.

22.
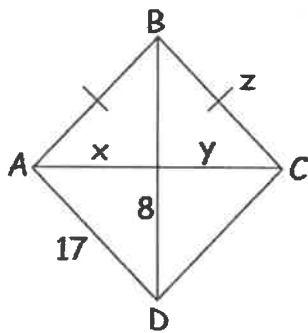
23.

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?

9 in.

40 in.