

SPECIAL PARALLELOGRAMS

Always, Sometimes or Never?

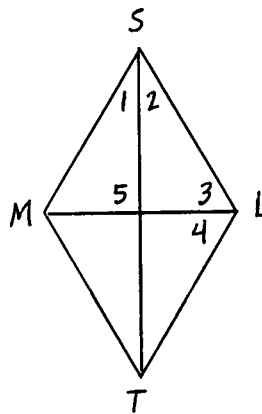
1. A square is _____ a rhombus.
2. The diagonals of a parallelogram _____ bisect the angles of the parallelogram.
3. The diagonals of a rhombus are _____ congruent.
4. A rectangle _____ has consecutive sides congruent.
5. The diagonals of a rhombus _____ bisect each other.

Place check marks in the appropriate spaces:

	Property	Parallelogram	Rectangle	Rhombus	Square
6.	Opposite sides are parallel				
7.	Opposite sides are congruent				
8.	Opposite angles are congruent				
9.	A diagonal forms 2 congruent triangles				
10.	Diagonals bisect each other				
11.	Diagonals are congruent				
12.	A diagonal bisects two angles				
13.	Diagonals are perpendicular				
14.	All angles are right angles				
15.	All sides are congruent				

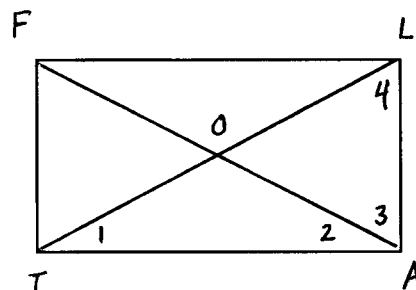
Quadrilateral SLTM is a rhombus:

16. If $m\angle 1 = 25$, find the measures of $\angle 2$, $\angle 3$, $\angle 4$ and $\angle 5$.
17. If $m\angle 1 = 3x + 1$ and $m\angle 2 = 11x - 24$, find x .
18. If $m\angle 1 = 3x + 1$ and $m\angle 3 = 7x - 11$, find x .



Quadrilateral FLAT is a rectangle:

19. If $m\angle 1 = 18$, find the measures of $\angle 2$, $\angle 3$ and $\angle 4$.
20. If $FA = 27$, find LO .
21. If $TO = 4y + 7$ and $FA = 30$, find y .



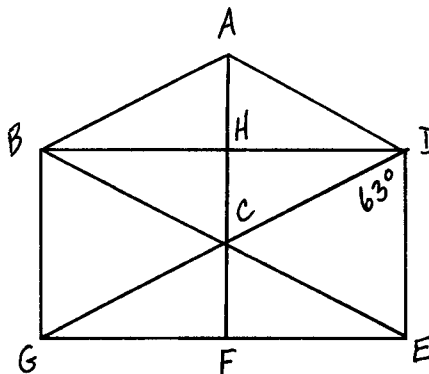
Quadrilateral BDEG is a rectangle; Quadrilateral ABCD is a rhombus:

22. Find $m \angle DAB$

23. Find $m \angle BCG$

24. Find $m \angle GCF$

25. Find $m \angle DEG$



Construct the following figures and explain your steps:

a

b

26. A parallelogram with diagonals a and b .

27. A rhombus with diagonals a and b :