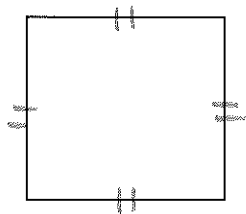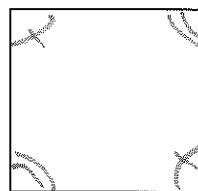# Rectangles, Rhombi & Squares

☆ Remember: ALL work must be shown to receive credit. Don't forget to check!

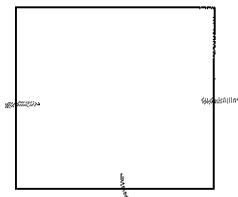Classify each figure with the most specific name possible. Give a reason for each answer.
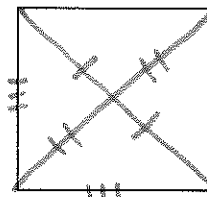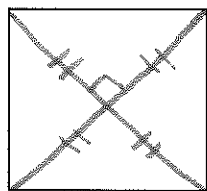
1)_____;_____

2)_____;_____

3)_____;_____

4)_____;_____

5)_____;_____

6)_____;_____
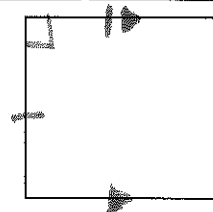
7)_____;_____
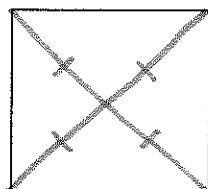
8)_____;_____
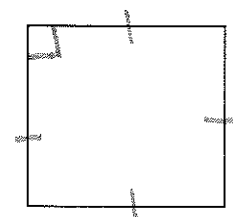
9) Quadrilateral QRST is a rectangle. Find each value or measure.

x = _____

m∠RPS = _____

$(x^2 + 1)°$

$(3x + 11)°$
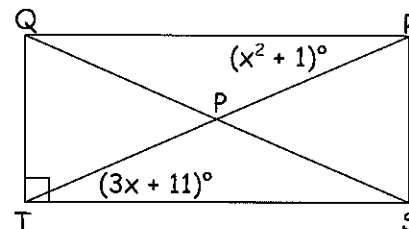
10) In rhombus ABCD, AB = 2x + 3, BC = 5x, and m∠ABC = 83.2°. Find each value or measure.
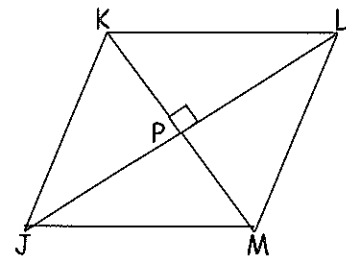
x = _____

AD = _____

m∠AEB = _____

m∠BCD = _____
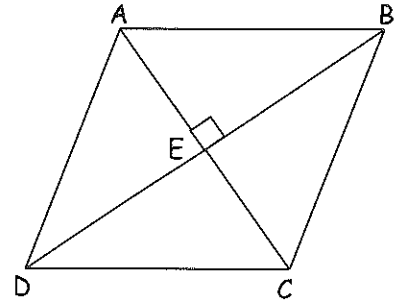
11) Given the vertices J(5, 0), K(8, -11), L(-3, -14), M(-6, -3), determine whether parallelogram JKLM is a rectangle, a rhombus, or a square. List ALL that apply. Show AND LABEL all work.
(Remember: You'll need to set up and solve 6 separate formulas.)

Write a 2-column proof:

12) Given: JKLM is a parallelogram
ΔJKL is isosceles with vertex K
Prove: JKLM is a rhombus

Statements	Reasons
1) JKLM is a parallelogram ΔJKL is isosceles with vertex K	1) Given
2) $\overline{LM} \cong \overline{KJ}$ and $\overline{KL} \cong \overline{JM}$	2)
3)	3) Definition of Isosceles Triangle
4) $\overline{LM} \cong \overline{KJ} \cong \overline{KL} \cong \overline{JM}$	4)
5) JKLM is a rhombus	5)