Characteristics of Quadrilaterals

Directions: Complete the table by placing an '**X**' in the appropriate row and column to associate each figure with its properties.

Characteristic	Quadrilateral	Parallelogram	Rectangle	Square	Rhombus	Trapezoid	Isoseceles Trapezoid	Kite
Polygon with Four Sides								
Polygon with Four Vertices								
No Parallel Sides								
One Pair of Parallel Sides								
Two Pairs of Parallel Sides								
Two Pairs of Opposite Sides are Congruent								
Two Pairs of Consecutive Sides are Congruent								
All Sides are Congruent								
Two Pairs of Opposite Angles are Congruent								
All Angles are Congruent								
Base angles are congruent								
Diagonals are congruent								
Diagonals bisect each other								
Consecutive angles are supplementary								
Four right angles								
Diagonals bisect both pairs of opposite angles								
Diagonals bisect one pair of opposite angles								
Diagonals are perpendicular								

True or False

Directions: Determine whether each statement is true or false. If it is false, explain why.

1. A square is also a rectangle.

2. A rectangle is also a square

3. A parallelogram is also a trapezoid.

4. All squares are also rhombi.

Can You Read Joe's Mind?

Directions: Joe is thinking of a specific polygon. He has listed some hints. As you read each hint, use deductive reasoning to try and guess Joe's polygon. By the last hint, you should be able to read Joe's mind.

Problem 1: What shape is it? _____
1. The polygon has four sides.
2. The polygon has at least one pair of parallel sides.
3. The polygon has at least one pair of congruent opposite sides.
4. The polygon does not have four congruent angles.
5. The polygon has four congruent sides.

Problem 2: What shape is it? _____
1. The shape has two pairs of parallel sides.
2. The shape has two pairs of congruent sides.
3. The shape has four right angles.
4. One pair of opposite sides is longer than the other pair.

Problem 3: What shape is it? _____
1. The shape has no congruent sides.
2. The shape has one pair of parallel sides.
3. The shape has no right angles.