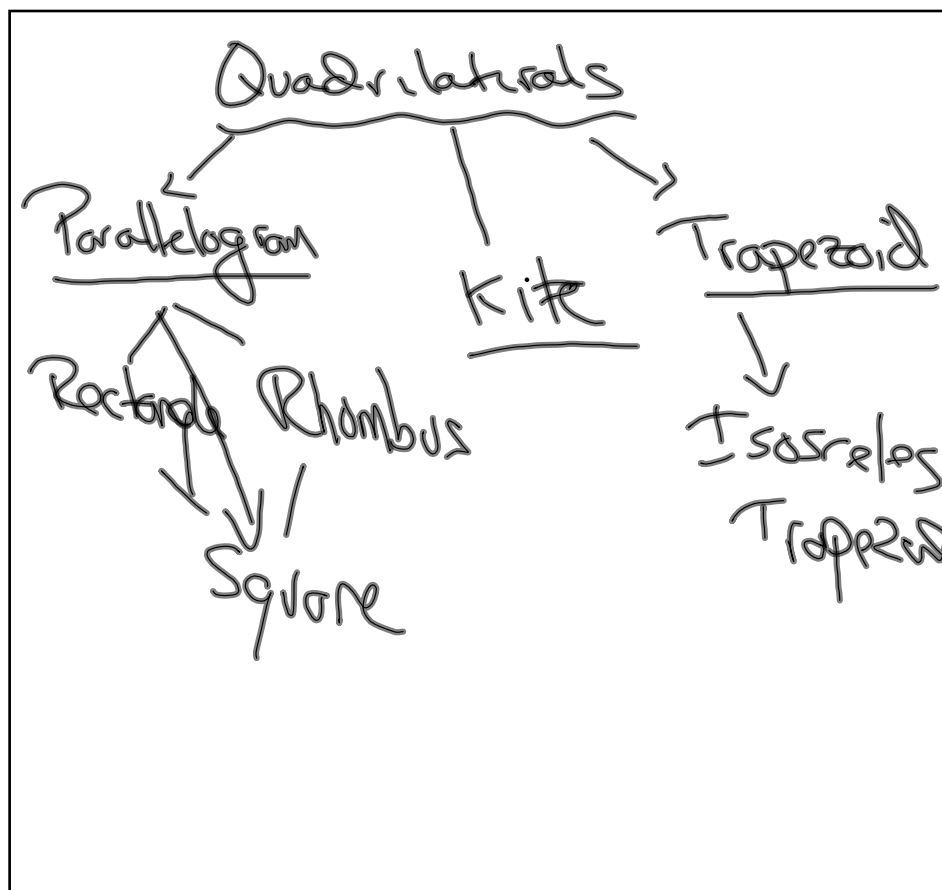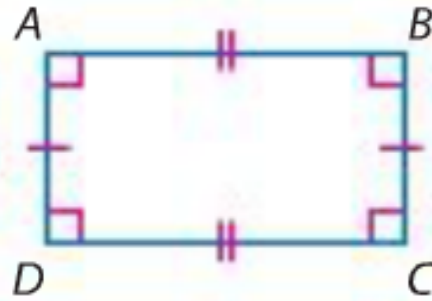# 6-4

Rectangles

Rectangles

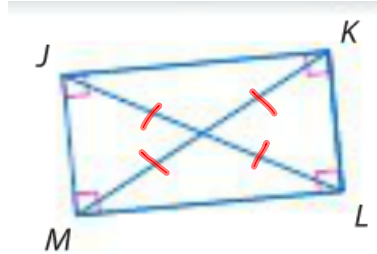*A rectangle is a parallelogram with 4 right angles.*

Rectangle *ABCD*

Since a Rectangle is a Parallelogram.....

ALL Parallelogram rules learned in Section 6.2 APPLY!

> ** Both pairs of opposite sides are parallel*
>
> ** Both pairs of opposite sides are congruent*
>
> ** Both pairs of opposite angles are congruent*
>
> ** Consecutive Angles are Supplementary*
>
> ** Diagonals Bisect each other*

Theorem 6.13

If a Parallelogram is a Rectangle, then it's diagonals are congruent.

$$\overline{JL} \cong \overline{MK}.$$

ALGEBRA Quadrilateral *DEFG* is a rectangle.

5. If $FD = 3x - 7$ and $EG = x + 5$, find EG.

6. If $m\angle EFD = 2x - 3$ and $m\angle DFG = x + 12$, find $m\angle EFD$.