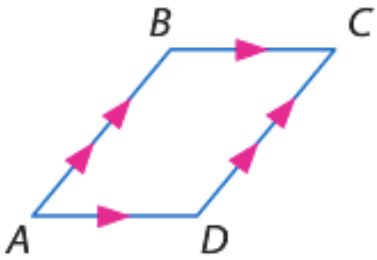
6-2

Parallelograms

Parallelogram

A parallelogram is a 4-sided figure (Quadrilateral), where both pairs of opposite sides are parallel to each other.



AB || CD

BC || AD

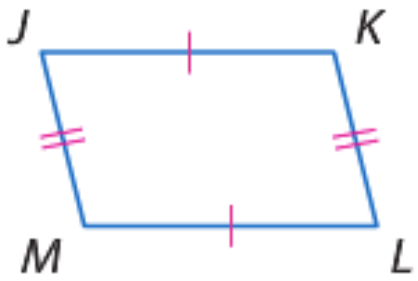
Theorems of Parallelograms

If a Quadrilateral is determined to be a Parallelogram, then these Theorems are all TRUE.

YOU DO NOT NEED TO MEMORIZE THE THEOREM NUMBER, JUST KNOW THE THEOREM.

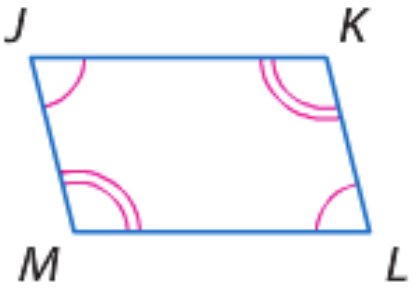
Theorem 6.3

If a Quadrilateral is a Parallelogram, then it's opposite sides are congruent.



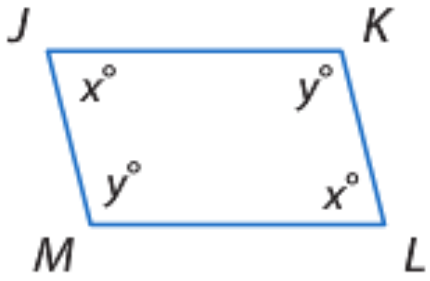
Theorem 6.4

If a Quadrilateral is a Parallelogram, then it's opposite angles are congruent.



Theorem 6.5

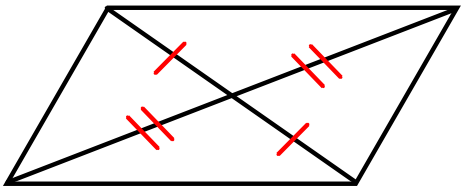
If a Quadrilateral is a Parallelogram, then it's consecutive angles are supplementary.

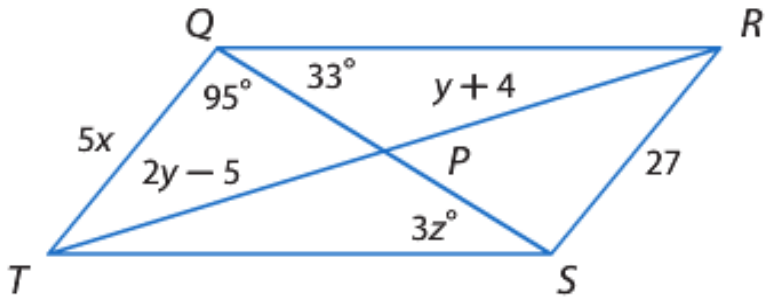
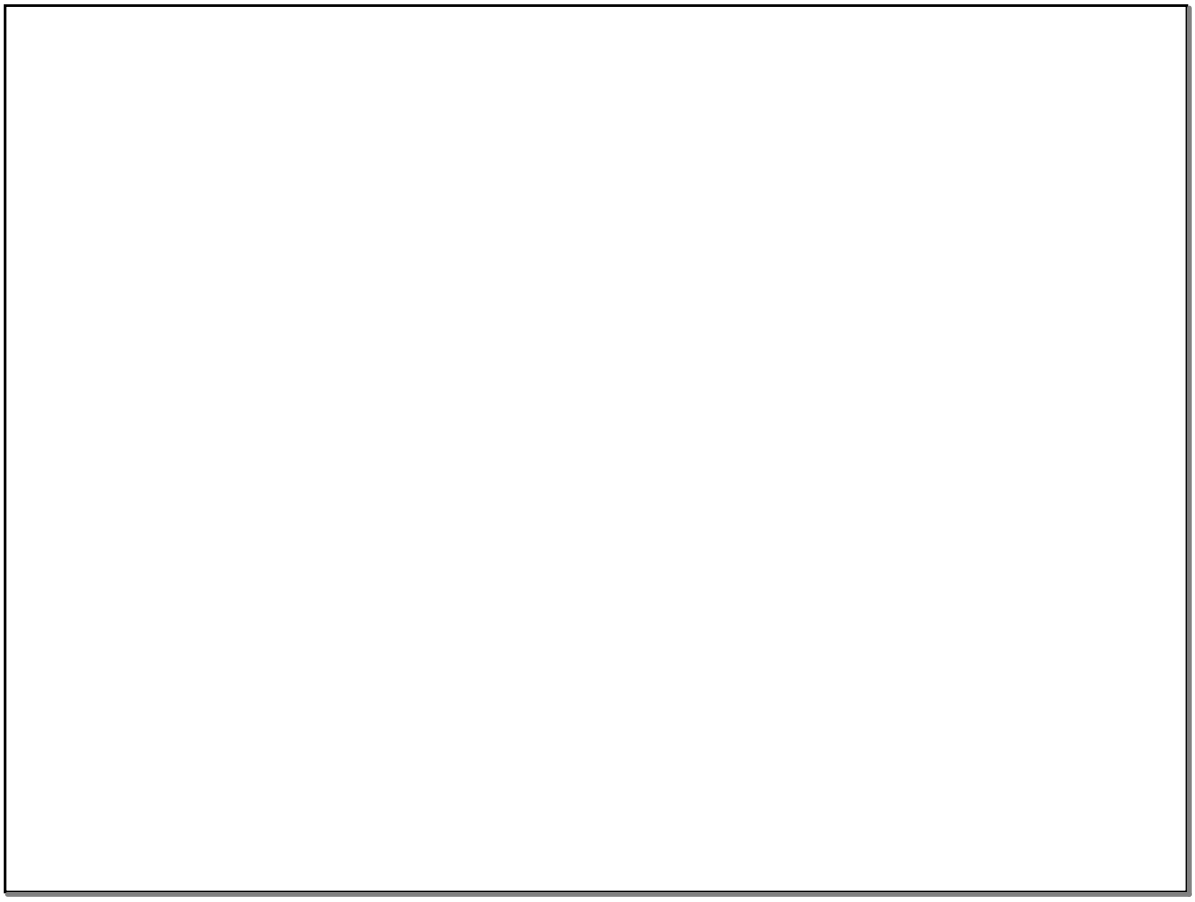


x + y = 180

Theorem 6.7

If a Quadrilateral is a Parallelogram, then it's diagonals bisect each other.



Use the picture below to solve for x, y, and z.

(use rules....HINT: look for alternate interior)