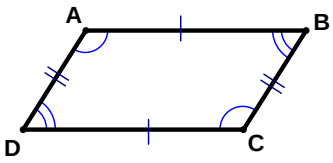
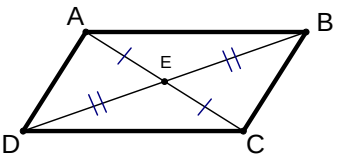
Geometry SOL Practice
Topic #9: Quadrilaterals
Notes

I. *Rules*

Parallelogram - Both Pairs of Opposite Sides Parallel

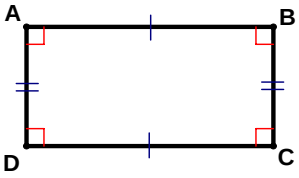


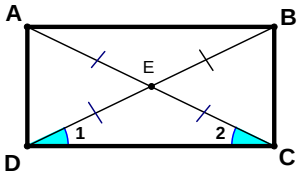


Theorem: Opposite Sides ≅.
Theorem: Opposite Angles ≅.

Theorem: Diagonals Bisect each other.

Rectangle - Parallelogram with Right Angles.



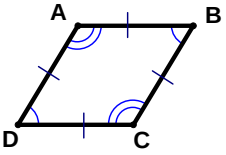


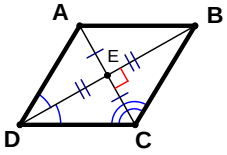
ALL Parallelogram Theorems Apply!

Theorem: Diagonals are ≅.

note: △DEC is isosceles making ∠1 ≅ ∠2.

Rhombus - Parallelogram with ≅ sides.

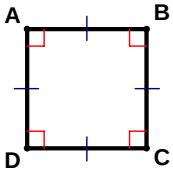


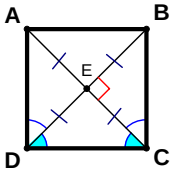


ALL Parallelogram Theorems Apply!

Theorem: Diagonals Bisect the ∠s.
Theorem: Diagonals are ⊥.

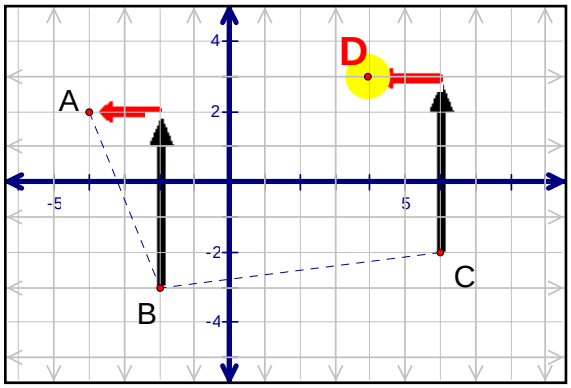
Square - Parallelogram with Right Angles and ≅ sides.





ALL Parallelogram, Rectangle, and Rhombus Theorems Apply!

II. *Coordinates*: Given 3 vertices, find the 4th.

Example: Find the coordinates of vertex D
so that Quadrilateral ABCD is a Parallelogram.
A = (- 4 , 2)
B = (- 2 , - 3)
C = (6 , - 2)
D = _____

Solution: Count from ***B*** to ***A***.
Count the same amount from ***C*** to the answer (***D***).