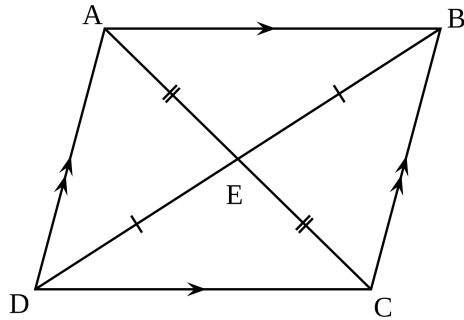


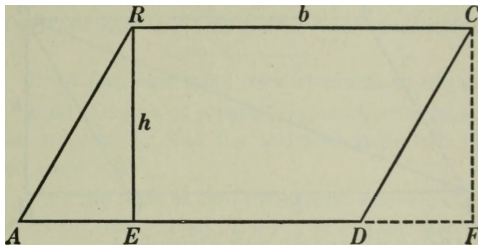
Definition:- A Parallelogram is a flat shape with opposite sides parallel and equal in length.



Where:

- ☛ Opposite sides are parallel
- ☛ Opposite sides are equal in length
- ☛ Opposite angles are equal (angles "a" are the same, and angles "b" are the same)
- ☛ Angles "a" and "b" add up to 180° , so they are supplementary angles.

Area of a Parallelogram:-

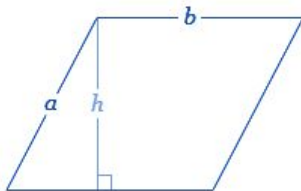


The area is **base times the height**;

$$\text{Area} = b \times h$$

(h is at right angle to b)

Perimeter of a Parallelogram:-



Perimeter of a Parallelogram Formula = $2(a + b)$ units

There are six important properties of parallelograms to know:-

1. Opposite sides are congruent ($AB = DC$).
2. Opposite angles are congruent ($D = B$).
3. Consecutive angles are supplementary ($A + D = 180^\circ$).
4. If one angle is right, then all angles are right.
5. The diagonals of a parallelogram bisect each other.
6. Each diagonal of a parallelogram separates it into two congruent triangles.