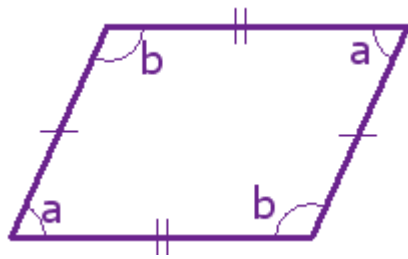


4.1 (pg.154) Area of Parallelograms

Parallelogram (<http://www.mathopenref.com/parallelogram.html>)



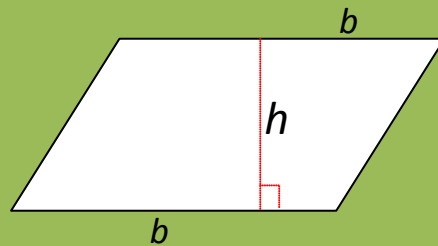
Opposite sides are parallel and equal in length, and opposite angles are equal (angles "a" are the same, and angles "b" are the same).

NOTE: Squares, Rectangles and Rhombuses are all Parallelograms!

Area of a Parallelogram is...

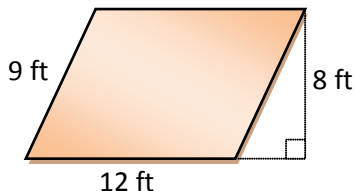
$$A = bh$$

(area is noted in square units)



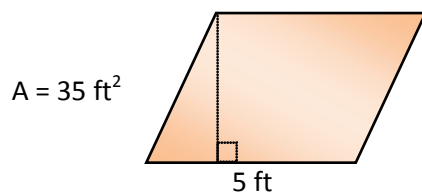
Example: Find the area of the parallelogram:

This measurement is not used to find area.



$$\begin{aligned} A &= bh \\ A &= (12)(8) \\ A &= 96 \text{ square feet (96 ft}^2\text{)} \end{aligned}$$

Example: Find the height of the parallelogram:



$$\begin{aligned} A &= bh \\ 35 &= 5 \cdot h \\ 35 &= 5 \cdot h \\ \frac{35}{5} &= \frac{5 \cdot h}{5} \\ 7 &= h \end{aligned}$$

So, the height is 7 feet.