

## 3.7 Parallelogram

Sides of a parallelogram:  $a, b$

Diagonals:  $d_1, d_2$

Consecutive angles:  $\alpha, \beta$

Angle between the diagonals:  $\varphi$

Altitude:  $h$

Perimeter:  $L$

Area:  $S$

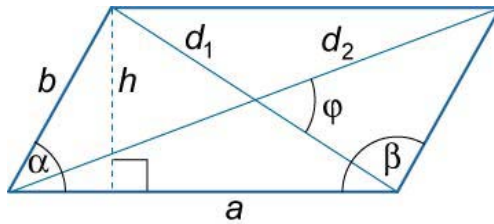


Figure 18.

205.  $\alpha + \beta = 180^\circ$

206.  $d_1^2 + d_2^2 = 2(a^2 + b^2)$

207.  $h = b \sin \alpha = b \sin \beta$

208.  $L = 2(a + b)$

209.  $S = ah = ab \sin \alpha,$

$$S = \frac{1}{2}d_1d_2 \sin \varphi.$$