

3.8 Rhombus

Side of a rhombus: a

Diagonals: d_1, d_2

Consecutive angles: α, β

Altitude: h

Radius of inscribed circle: r

Perimeter: L

Area: S

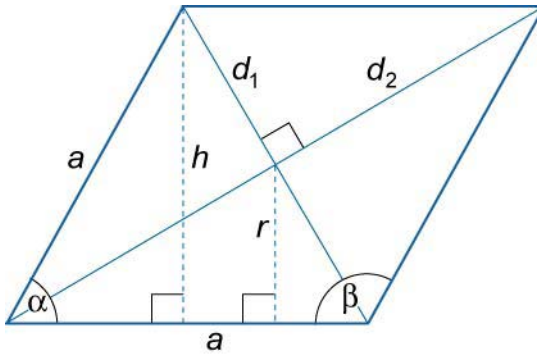


Figure 19.

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

211. $d_1^2 + d_2^2 = 4a^2$

212. $h = a \sin \alpha = \frac{d_1 d_2}{2a}$

213. $r = \frac{h}{2} = \frac{d_1 d_2}{4a} = \frac{a \sin \alpha}{2}$

214. $L = 4a$

215. $S = ah = a^2 \sin \alpha$,
 $S = \frac{1}{2} d_1 d_2$.

