

## 3.2 Isosceles Triangle

Base:  $a$

Legs:  $b$

Base angle:  $\beta$

Vertex angle:  $\alpha$

Altitude to the base:  $h$

Perimeter:  $L$

Area:  $S$

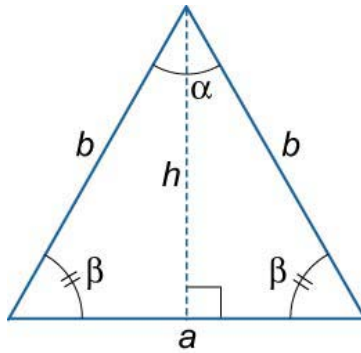


Figure 11.

172.  $\beta = 90^\circ - \frac{\alpha}{2}$

173.  $h^2 = b^2 - \frac{a^2}{4}$

174.  $L = a + 2b$

175.  $S = \frac{ah}{2} = \frac{b^2}{2} \sin \alpha$