

3.10 Isosceles Trapezoid

Bases of a trapezoid: a, b

Leg: c

Midline: q

Altitude: h

Diagonal: d

Radius of circumscribed circle: R

Area: S

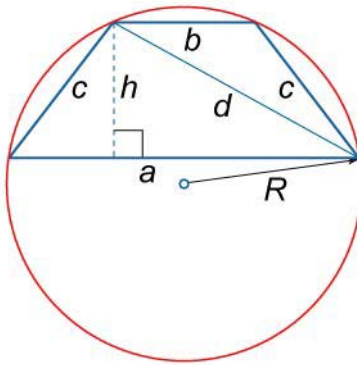


Figure 21.

$$218. \quad q = \frac{a+b}{2}$$

$$219. \quad d = \sqrt{ab + c^2}$$

$$220. \quad h = \sqrt{c^2 - \frac{1}{4}(b-a)^2}$$

$$221. \quad R = \frac{c\sqrt{ab + c^2}}{\sqrt{(2c - a + b)(2c + a - b)}}$$

$$222. \quad S = \frac{a+b}{2} \cdot h = qh$$