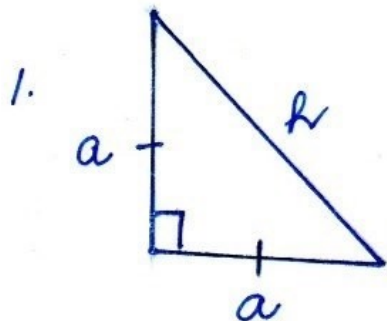


Herons Formula - Ex 12.1

NCERT Exemplar Solutions by Dev Anoop (Bathinda)



area of isosceles right Δ
 $= 8 \text{ cm}^2$

$$\frac{1}{2} a \times a = 8$$

$$\Rightarrow a^2 = 16$$

$$\Rightarrow a = \sqrt{16}$$

$$= 4 \text{ cm}$$

In rt Δ

$$h^2 = a^2 + a^2 \quad (\text{pythagoras theorem})$$

$$\Rightarrow h = \sqrt{2a^2}$$

$$= \sqrt{2} a$$

$$= \sqrt{2} \times 4$$

$$= 4\sqrt{2} \text{ cm or } \sqrt{32} \text{ cm (A)}$$

or

area of isosceles right $\Delta = 8 \text{ cm}^2$

$$\frac{1}{2} a \times a = 8$$

$$\Rightarrow a^2 = 16$$

In rt Δ

$$h^2 = a^2 + a^2$$

$$= 2a^2$$

$$= 2 \times 16$$

$$\because a^2 = 16$$

$$\Rightarrow h = \sqrt{32} \text{ cm}$$