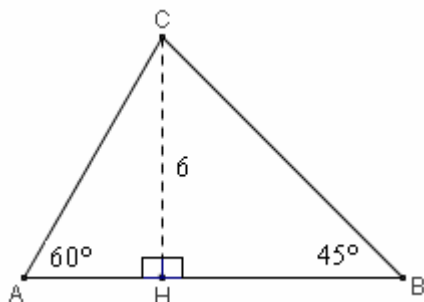


□ **PROBLEMI CON TRIANGOLI RETTANGOLI “PARTICOLARI”**
 ($90^\circ/30^\circ/60^\circ$, $90^\circ/45^\circ/45^\circ$)

- 1) Nel triangolo ABC è $\hat{A} = 60^\circ$, $\hat{B} = 45^\circ$, e l'altezza CH misura cm 6.
 Trovare perimetro e area di ABC.



AHC ($90^\circ, 60^\circ, 30^\circ$):

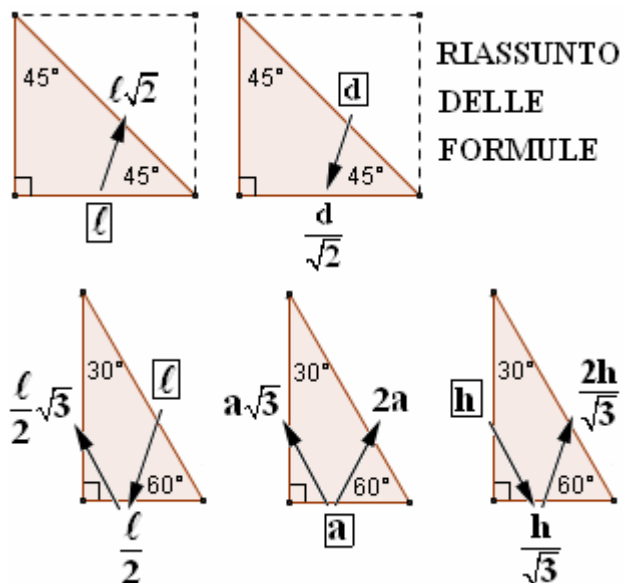
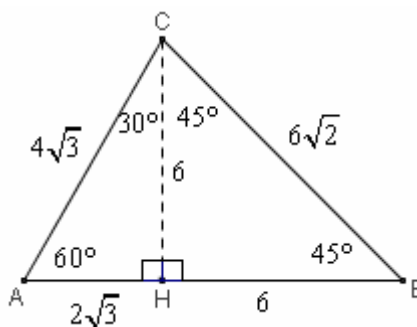
$$AH = \frac{CH}{\sqrt{3}} = \frac{6}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{6\sqrt{3}}{3} = 2\sqrt{3} \text{ cm}$$

$$AC = 2 \cdot AH = 2 \cdot 2\sqrt{3} = 4\sqrt{3} \text{ cm}$$

BHC ($90^\circ, 45^\circ, 45^\circ$):

$$BH = CH = 6 \text{ cm}$$

$$BC = BH\sqrt{2} = 6\sqrt{2} \text{ cm}$$



$$2p(ABC) = AB + BC + AC =$$

$$= (2\sqrt{3} + 6) + 6\sqrt{2} + 4\sqrt{3} = 6 + 6\sqrt{2} + 6\sqrt{3} = 6(1 + \sqrt{2} + \sqrt{3}) \text{ cm}$$

$$S(ABC) = \frac{AB \cdot CH}{2} = \frac{(2\sqrt{3} + 6) \cdot 6}{2} = 2(\sqrt{3} + 3) \cdot 3 = 6(\sqrt{3} + 3) \text{ cm}^2$$