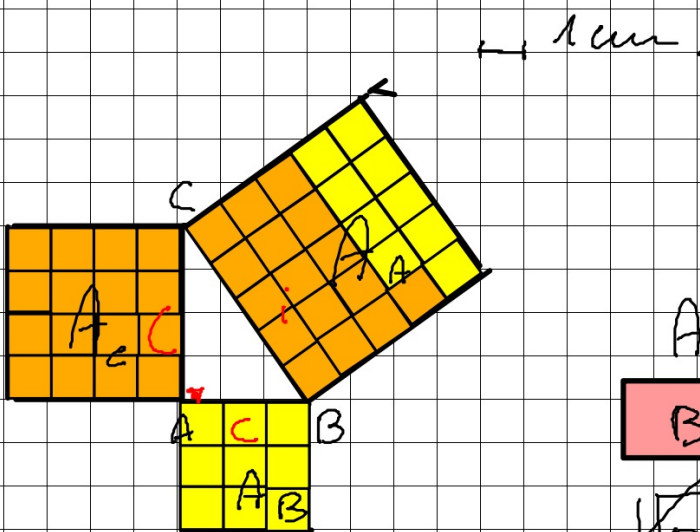


Nel triangolo rettangolo il quadrato costruito sull'ipotenusa è EQUIVALENTE alla somma dei quadrati costruiti sui due cateti

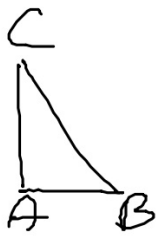


$$A_A = A_B + A_C$$

$$BC^2 = AB^2 + AC^2$$

$$\sqrt{BC^2} = \sqrt{AB^2 + AC^2}$$

$$BC = \sqrt{AB^2 + AC^2}$$



$$\begin{array}{l} AB = 3 \text{ cm} \\ AC = 4 \text{ cm} \end{array} \Bigg| BC$$

$$BC = \sqrt{AB^2 + AC^2} = \sqrt{3^2 + 4^2} = \sqrt{\cancel{7^2}} = \sqrt{9 + 16} = \sqrt{25} = 5 \text{ cm}$$



$$\begin{array}{l|l} \hat{A} = 90^\circ & P \\ AB = 24 \text{ cm} & A \\ AC = 18 \text{ cm} & \end{array}$$

$$BC = \sqrt{AB^2 + AC^2} = \sqrt{24^2 + 18^2} = \sqrt{576 + 324} = \sqrt{900} = 30 \text{ cm}$$

$$P = AB + BC + CA = 18 + 24 + 30 = 72 \text{ cm}$$

$$A = \frac{AB \cdot CA}{2} = \frac{24 \cdot 18}{2} = 216 \text{ cm}^2$$

1:2

1:4



$$\begin{array}{l} \hat{A} = 90^\circ \\ AB + CA = 35 \text{ cm} \\ AB = \frac{3}{4} CA \end{array} \quad \left| \begin{array}{l} P = \\ A = \end{array} \right.$$

$$U = (AB + CA) : 7 = 35 : 7 = 5 \text{ cm}$$

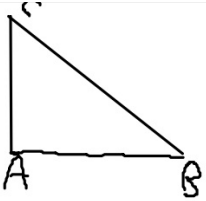
$$AB = U \cdot 3 = 5 \cdot 3 = 15 \text{ cm}$$

$$CA = U \cdot 4 = 5 \cdot 4 = 20 \text{ cm}$$

$$BC = \sqrt{AB^2 + CA^2} = \sqrt{15^2 + 20^2} = \sqrt{225 + 400} = \sqrt{625} = 25 \text{ cm}$$

$$P = AB + BC + CA = 15 + 25 + 20 = 60 \text{ cm}$$

$$A = \frac{AB \cdot CA}{2} = \frac{15 \cdot \overset{10}{\cancel{20}}}{\underset{1}{\cancel{2}}} = 150 \text{ cm}^2 \quad 1:5$$



$$\begin{array}{l}
 D \\
 AB + AC = 84 \text{ m} \quad P = \\
 AB - AC = 12 \text{ m} \quad A =
 \end{array}$$

$$AB = \frac{D + d}{2} = \frac{84 + 12}{2} = \frac{96}{2} = 48 \text{ m}$$

$$AC = \frac{D - d}{2} = \frac{84 - 12}{2} = \frac{72}{2} = 36 \text{ m}$$

$$BC = \sqrt{AB^2 + AC^2} = \sqrt{48^2 + 36^2} = \sqrt{2304 + 1296} = \sqrt{3600} = 60 \text{ m}$$

$$P = AB + AC + BC = 48 + 36 + 60 = 144 \text{ m}$$

$$A = \frac{AB \cdot AC}{2} = \frac{48 \cdot 36}{2} = 864 \text{ m}^2$$