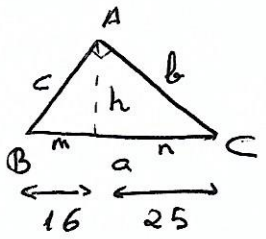
①



$h^2 = m.n$

$h^2 = 400$ $\boxed{h = 20}$

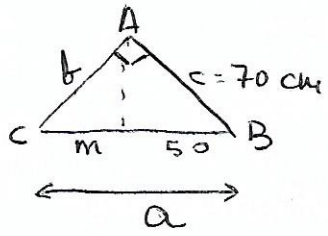
$c^2 = a.m$ $\quad$ $b^2 = a.n$

$c^2 = 41.16$ $\quad$ $b^2 = 41.25$

$\boxed{c = 25,61}$ $\quad$ $\boxed{b = 32,01}$

hipotenusa: 41 cm
Altura : 20 cm
Catetos : 25,61 cm
32,01 cm

②



$c^2 = a.50$

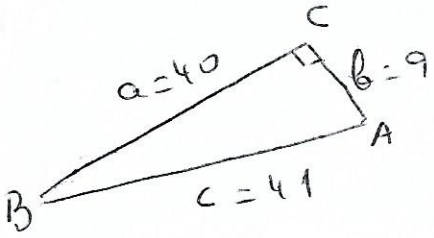
$4900 = 50a$ $\boxed{a = 98}$ $\Rightarrow$ $m = 98 - 50$

$\boxed{m = 48}$

$b^2 = 98.48$

$\boxed{b = 68,58}$

③



$\text{Sen}\,\hat{B} = \frac{9}{41}$ $\quad$ $\text{Csec}\,\hat{B} = \frac{41}{9}$

$\text{Cos}\,\hat{B} = \frac{40}{41}$ $\quad$ $\text{Sec}\,\hat{B} = \frac{41}{40}$

$\text{tang}\,\hat{B} = \frac{9}{40}$ $\quad$ $\text{Cotag}\,\hat{B} = \frac{40}{9}$

$\text{Sen}\,\hat{A} = \frac{40}{41}$ $\quad$ $\text{Csec}\,\hat{A} = \frac{41}{40}$

$\text{Cos}\,\hat{A} = \frac{9}{41}$ $\quad$ $\text{Sec}\,\hat{A} = \frac{41}{9}$

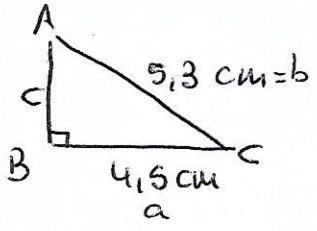
$\text{tang}\,\hat{A} = \frac{40}{9}$ $\quad$ $\text{cotang}\,\hat{A} = \frac{9}{40}$

Observa que $\text{Sen}\,\hat{A} = \text{Cos}\,\hat{B}$

$\text{Cos}\,\hat{A} = \text{Sen}\,\hat{B}$

por ser ángulos complementarios

④



$c^2 + a^2 = b^2$

$c^2 + 4,5^2 = 5,3^2$

$c = 2,8$ cm

$\text{Sen}\,\hat{A} = \frac{4,5}{5,3} = 0,85$ $\quad$ $\text{sen}\,\hat{C} = \text{Cos}\,\hat{A}$

$\text{Cos}\,\hat{A} = \frac{2,8}{5,3} = 0,53$ $\quad$ $\text{Cos}\,\hat{C} = \text{Sen}\,\hat{A}$

$\text{tang}\,\hat{A} = \frac{0,85}{0,53} = 1,60$ $\quad$ $\text{tang}\,\hat{C} = \text{Cotang}\,\hat{A}$

$\hat{A} = \text{arc Sen}\,0,85$ $\quad$ $\hat{C} = 180 - (A + 90^\circ)$

$\hat{A} = 58^\circ 6' 33''$ $\quad$ $\hat{C} = 31^\circ 53' 27''$