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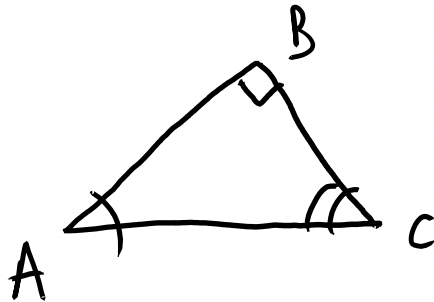
b) a) ... les 2 angles aigus sont $< 90^\circ$

$$\rightarrow \hat{A} + \hat{C} = 90^\circ$$

$$\cos \hat{A} = \frac{AB}{AC}$$

$$\sin \hat{A} = \frac{BC}{AC}$$

$$\operatorname{tg} \hat{A} = \frac{BC}{AB}$$



$$\cos \hat{C} = \frac{BC}{AC}$$

$$\sin \hat{C} = \frac{AB}{AC}$$

$$\operatorname{tg} \hat{C} = \frac{AB}{BC}$$

$$\rightarrow \cos \hat{A} = \sin \hat{C} ; \sin \hat{A} = \cos \hat{C}$$

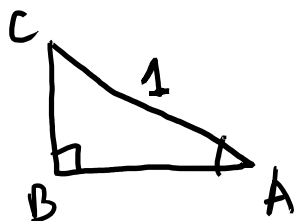
$$\operatorname{tg} \hat{A} = \frac{1}{\operatorname{tg} \hat{C}} ; \operatorname{tg} \hat{C} = \frac{1}{\operatorname{tg} \hat{A}}$$

⚠ $\hat{A} + \hat{C} = 90^\circ \Rightarrow \hat{C} = 90^\circ - \hat{A}$

Alors: $\cos(90^\circ - \hat{A}) = \sin(\hat{A})$

$$\sin(90^\circ - \hat{A}) = \cos(\hat{A})$$

$$\operatorname{tg}(90^\circ - \hat{A}) = \frac{1}{\operatorname{tg}(\hat{A})}$$



\Rightarrow Pythagore: $AB^2 + BC^2 = 1$

$$AB = \cos \hat{A} ; BC = \sin \hat{A}$$

$$\Rightarrow \cos^2 \hat{A} + \sin^2 \hat{A} = 1$$