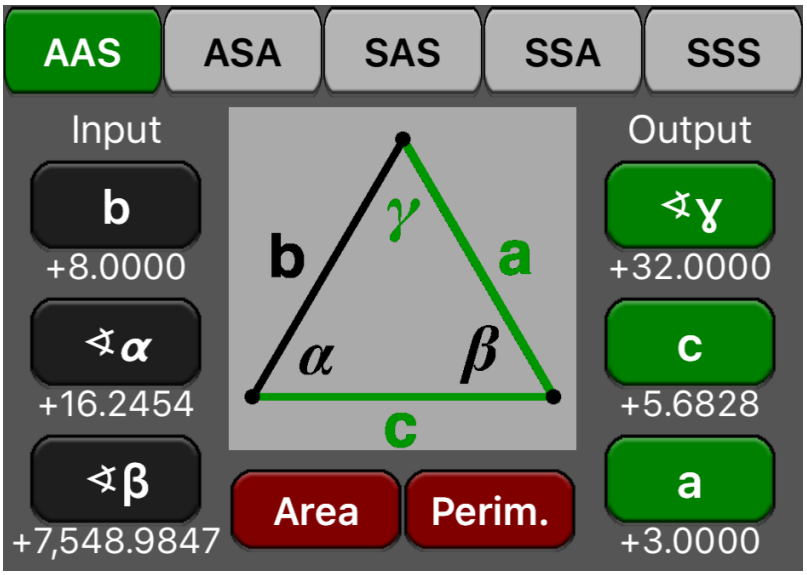
Plane Triangle Solution Menu

This menu allows you to resolve a triangle knowing 3 values where, at least one, must be the length of a side. To show the menu, touch the "**OPT**" key, and in the "**1) Scientific:**" section, touch the "**Plane Triangle**" button.



	AAS	ASA	SAS	SSA	SSS
Inputs	[b] [∢α] [∢β]	[∢α] [c] [∢β]	[b] [∢γ] [a]	[b] [c] [∢β]	[b] [c] [a]
Calculated Outputs	[∢γ] [c] [a]	[b] [∢γ] [a]	[∢α] [c] [∢β]	[∢α] [∢γ] [a]	[∢α] [∢γ] [∢β]
[Area]	Calculates the Area of the triangle with the current 'a', 'b' and 'c' values.				
[Perim.]	Calculates the Perimeter of the triangle with the current 'a', 'b' and 'c' values.				

Example: (SSS)
In a triangle ABC, the sides are 6 cm, 10 cm and 14 cm. Show that the triangle is obtuse angled with the obtuse angle equal to 120º.

Solution : (DEG angle mode)

Keystrokes	Description
[SSS]	Set 'SSS' calculation mode.
type 6 **[b]** type 10 **[c]** type 14 **[a]**	Store the 'a' side length. Store the 'b' side length. Store the 'c' side length.
[∢α] **[∢ɣ]** **[∢β]**	Calculates angle 'α'. **∢α = 120.00** Calculates angle 'ɣ'. **∢ɣ = 38.21** Calculates angle 'β'. **∢β = 21.79**

Example: (SAS)
Two sides of a triangle are 5 and 8 units and their included angle is 60º. Solve the triangle and, What is the triangle's area and perimeter?

Solution : (DEG angle mode)

Keystrokes	Description
[SAS]	Set 'SSS' calculation mode.
type 5 **[b]** type 60 **[∢ɣ]** type 8 **[a]**	Store the 'a' side length. Store the 'ɣ' angle. Store the 'b' side length.
[∢α] **[c]** **[∢β]**	Calculates angle 'α'. **∢α = 81.79** Calculates side 'c'. **c = 7.00** Calculates angle 'β'. **∢β = 38.21**

Keystrokes	Description
[Area]	Calculate the Area. **AREA = 17.32**
[Perim.]	Calculate the Perimeter. **PERIM = 20.00**