


Resulting Horizontal Prism

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 NOTE: This calculator in *eye tools* is used to determine that amount of *Resulting Horizontal Prism* that is created when lens centration (*Fitted PD*) does not match the *Patient's PD*.


The calculation is affected by the lens power in the horizontal meridian of the lens. This power is in turn affected by the *Sphere*, the *Cyl* and the *Axis* of prescription in each eye.

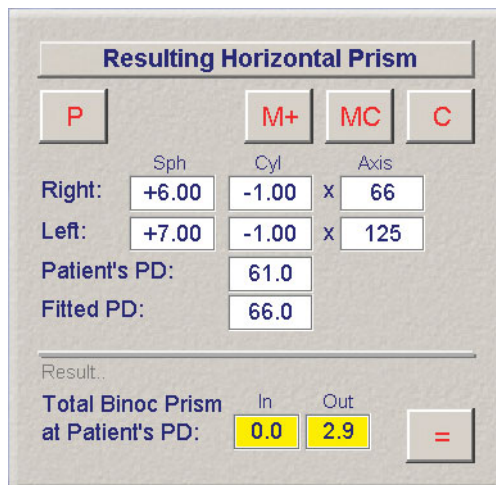
1. Click on to clear all data.
2. Enter the prescriptions for the *Right* and *Left* eyes.
3. Enter the *Patient's PD* and the *Fitted PD* for the lenses in the frame.
4. Click on to make the calculation.
5. The result is displayed as the *Total Binocular Prism at the Patient's PD*.
6. To print a copy of the results: Click on .
7. To copy the result to the clipboard (so that it can be pasted into a different program): Click on (The clipboard can be cleared with).

✓ **Tip:**

- This calculation is used when lenses have not been fitted to exactly match the patient's PD. The result can be used to judge whether the amount of horizontal prism (Base In or Base Out) will cause clinical problems.

The calculator can also be used to determine the PD that lenses should be fitted at in order to deliberately create a specific amount of horizontal prism for a patient.

 EXAMPLE: A patient's prescription of R: +6.00 / -1.00 x 66 and L: +7.00 -1.00 x 125 has been fitted at a PD of 66, instead the correct PD of 61. The resulting prism is a binocular total of 2.9 Base Out.



Resulting Horizontal Prism				
<input type="button" value="P"/>	<input type="button" value="M+"/>	<input type="button" value="MC"/>	<input type="button" value="C"/>	
	Sph	Cyl	x	Axis
Right:	+6.00	-1.00	x	66
Left:	+7.00	-1.00	x	125
Patient's PD:	61.0			
Fitted PD:	66.0			
Result..				
Total Binoc Prism at Patient's PD:	In	Out	<input type="button" value="="/>	
	0.0	2.9		

Figure: The calculator for Resulting Horizontal Prism