



Spectacle Lens Blank Size

Inputs:

1: Patient's PD
A

2: Frame Eye Size
B

3: Frame Bridge Size
C

4: Frame Longest Meridian
D

Calculations:

$$B \text{ } + C \text{ } = \text{ } \\ E$$

If $E > A$

$$E \text{ } - A \text{ } + D \text{ } = \text{ } \\ F$$

If $E < A$ -or- $E = A$

$$A \text{ } - E \text{ } + D \text{ } = \text{ } \\ F$$

Result:

If $F > D$ =
F

If $F < D$ -or- $F = D$ =
D

This result is the minimum spectacle lens blank size for cut-out into the selected frame

Legend:

Input Interim Final

(All distances are expressed in mm)

Example

In this example the patient has a PD of 65 and selects a 54/18 frame with a longest meridian of 56.

The calculation is important because it allows the smallest possible stock lens to be ordered, thus saving on lens thickness if the power is plus.

It also ensures that less expensive stock lenses can be used rather than ordering lenses to be specially ground.

When lenses are being custom made, this calculation ensures that the blank will be big enough, but also not too big, when the frame arrives for fitting.



Spectacle Lens Blank Size

Inputs:

- | | | | |
|-------------------|---|---------------------------|---|
| 1: Patient's PD | <input type="text" value="65"/>
<i>A</i> | 3: Frame Bridge Size | <input type="text" value="18"/>
<i>C</i> |
| 2: Frame Eye Size | <input type="text" value="54"/>
<i>B</i> | 4: Frame Longest Meridian | <input type="text" value="56"/>
<i>D</i> |

Calculations:

$$B \text{ } + C \text{ } = \text{ } \text{ *E* }$$



If $E > A$

$$E \text{ } - A \text{ } + D \text{ } = \text{ } \text{ *F* }$$



If $E < A$ -or- $E = A$

$$A \text{ } - E \text{ } + D \text{ } = \text{ } \text{ *F* }$$

Result:



If $F > D$

$$= \text{ } \text{ *F* }$$



If $F < D$ -or- $F = D$

$$= \text{ } \text{ *D* }$$

This result is the minimum spectacle lens blank size for cut-out into the selected frame

Legend:

Input Interim Final

(All distances are expressed in mm)