Optical Math 101

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Why is it important to learn optical equations and formulas?

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Transposing Prescriptions

 Combine sphere with cylinder

 Change sign of cylinder

 Change axis by 90

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Spherical Equivalent

 Combine sphere and half of the cylinder

 Drop axis

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Reading only Rx

 Combine add power with sphere

 Cylinder and axis remain the same

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Create a mid-range only Rx

 Divide the add power in half

 Combine with sphere

 Cylinder and axis remain the same

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Prentice’s Rule

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Calculating Frame PD

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Calculating Decentration

 Binocular PD

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 Monocular PD

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Vertical Decentration

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Minimum blank size

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