Measurements

Lower case variables represent distances and lengths. Upper case letters represent points.

\[ A \quad n \quad B \]

Geometric Length:
\[ d = \overline{AB} = -\ell \]

Optical Length:
\[ [AB] = nd = -n\ell \quad [BA] = n\ell = -nd \]

Conjugates

Primed variables represent quantities related to image space. Unprimed variables represent quantities in object space. Variables that appear primed and unprimed represent conjugate points (they are images of each other).

Components

Lenses and Mirrors

Prisms

Physical Prism with No Roof

Schematic Representation with No Roof

Physical Prism with a Roof

Schematic Representation with a Roof