Computation of the View Frustum for OpenGL/Projection Matrix

- **Given:**
  \[ i = \text{interpupillary distance} \div 2, \]
  \[ w/h = \text{aspect ratio}, \quad \alpha = \text{horizontal FoV}, \]
  \[ n = \text{near plane}, \quad z_0 = \text{zero-parallax depth} \]

- **Task:** determine **left/right/top/bottom** for `glFrustum()`

- **Assumption (for now):** no head tracking → cyclop's eye is in front of the center of the viewport

- **Example:**
  compute **left** for left eye

\[
l_c = n \tan \frac{\alpha}{2}
\]

\[
l' = i \frac{z_0 - n}{z_0}
\]

\[
l = l_c + l' - i = l_c - i \frac{n}{z_0}
\]