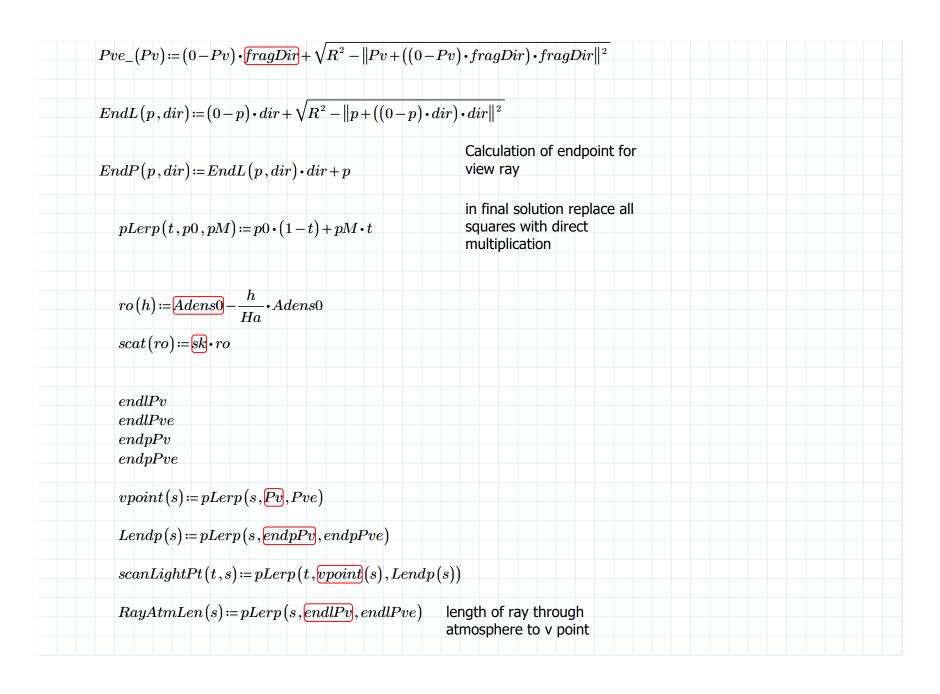
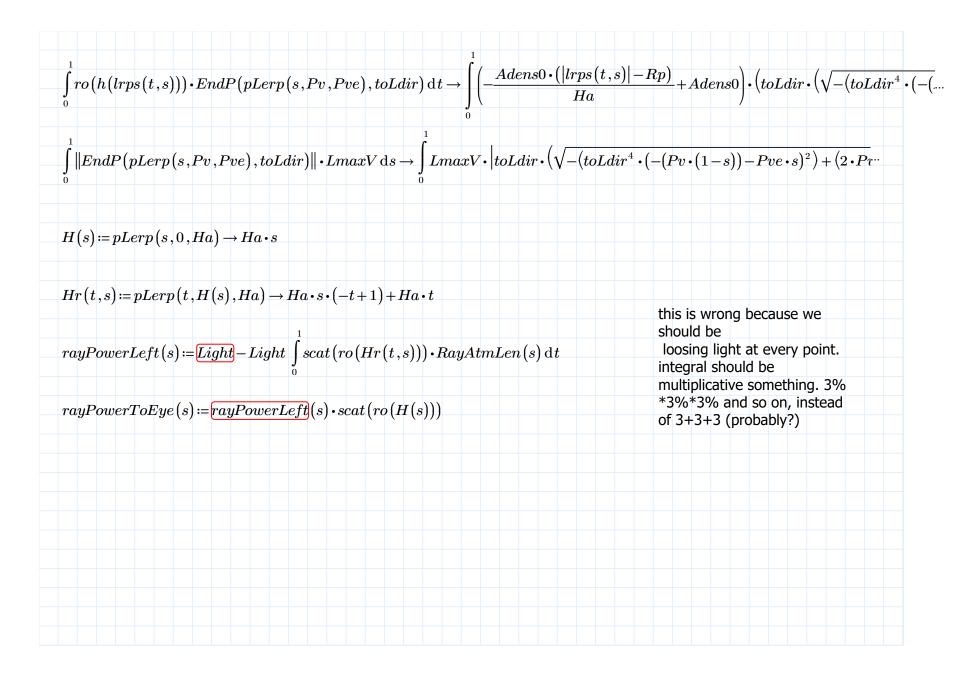
Parametrization of line is blend between points $pos(t, p0, pM) := p0 \cdot (1-t) + pM \cdot t$ $\frac{\mathrm{d}}{\mathrm{d}t}pos(t,p0,pM) \to pM - p0$ arclength of a line between 2 pts $\int_{0}^{\cdot} |pM - p0| \, \mathrm{d}t \to \sqrt{(pM - p0)^{2}}$ $\left| (\overrightarrow{pos(t,p0,pM) \cdot y}) \cdot \left| \frac{\mathrm{d}}{\mathrm{d}t} pos(t,p0,pM) \right| \mathrm{d}t \rightarrow \frac{y \cdot (pM+p0) \cdot \sqrt{(pM-p0)^2}}{2} \right|$ $h(p) \coloneqq \|p\| - Rp$ $\frac{\mathrm{d}}{\mathrm{d} t} \overline{pos(t)} \to ?$ PvfragDirR = 70 RpHa





those are two most important integrals which approximate light that comes to eye. $\int\limits_{0}^{1} ray Power To Eye\left(s\right) \cdot Lmax V \, \mathrm{d}s \rightarrow \frac{-\left(Adens 0 \cdot Light \cdot Lmax V \cdot sk \cdot \left(\left(Adens 0 \cdot end lPve + 3 \cdot Adens 0 \cdot end lPv\right) \cdot sk - 12\right)\right)}{24}$ $\int\limits_{0}^{1} ray Power Left(s) \cdot Lmax V \, \mathrm{d}s \rightarrow -\frac{Adens0 \cdot Light \cdot Lmax V \cdot end lPve \cdot sk}{12} + \left(Light \cdot Lmax V - \frac{Adens0 \cdot Light \cdot Lmax V \cdot end lPv \cdot sk}{6}\right)$ $\begin{cases} \int\limits_{0}^{1} ro(h(scanLightPt(t,s))) \cdot Lendp(s) \, \mathrm{d}t \cdot LmaxV \, \mathrm{d}s \\ \\ \int\limits_{0}^{1} ro(h(pLerp(t,pLerp(s,Pv,Pve),EndP(pLerp(s,Pv,Pve),toLdir)))) \cdot \frac{\mathrm{d}}{\mathrm{d}t} pLerp(t,pLerp(s,Pv,Pve),EndP(pLerp(s,Pv,Pve),toLdir))) \end{cases}$ well lol mathcad still cant