

$$c := 3 \cdot 10^8$$

<=>

$$\frac{a}{c} + \frac{a}{d1} = \frac{2a}{c}$$

$$d1(c1) := \frac{c1}{2 \cdot \frac{c1}{c} - 1} \quad \text{eq [1]}$$

$$d1 = \frac{c1}{2 \cdot \frac{c1}{c} - 1}$$

$$\frac{r}{cr} = \frac{x}{cx} + \frac{y}{cy} \quad \text{with} \quad |r| = 1 \quad \text{we get}$$

$$c2(\alpha, c1) := \frac{c}{\left(\frac{c}{c1}\right) \cdot \sin(\alpha) + 1}$$

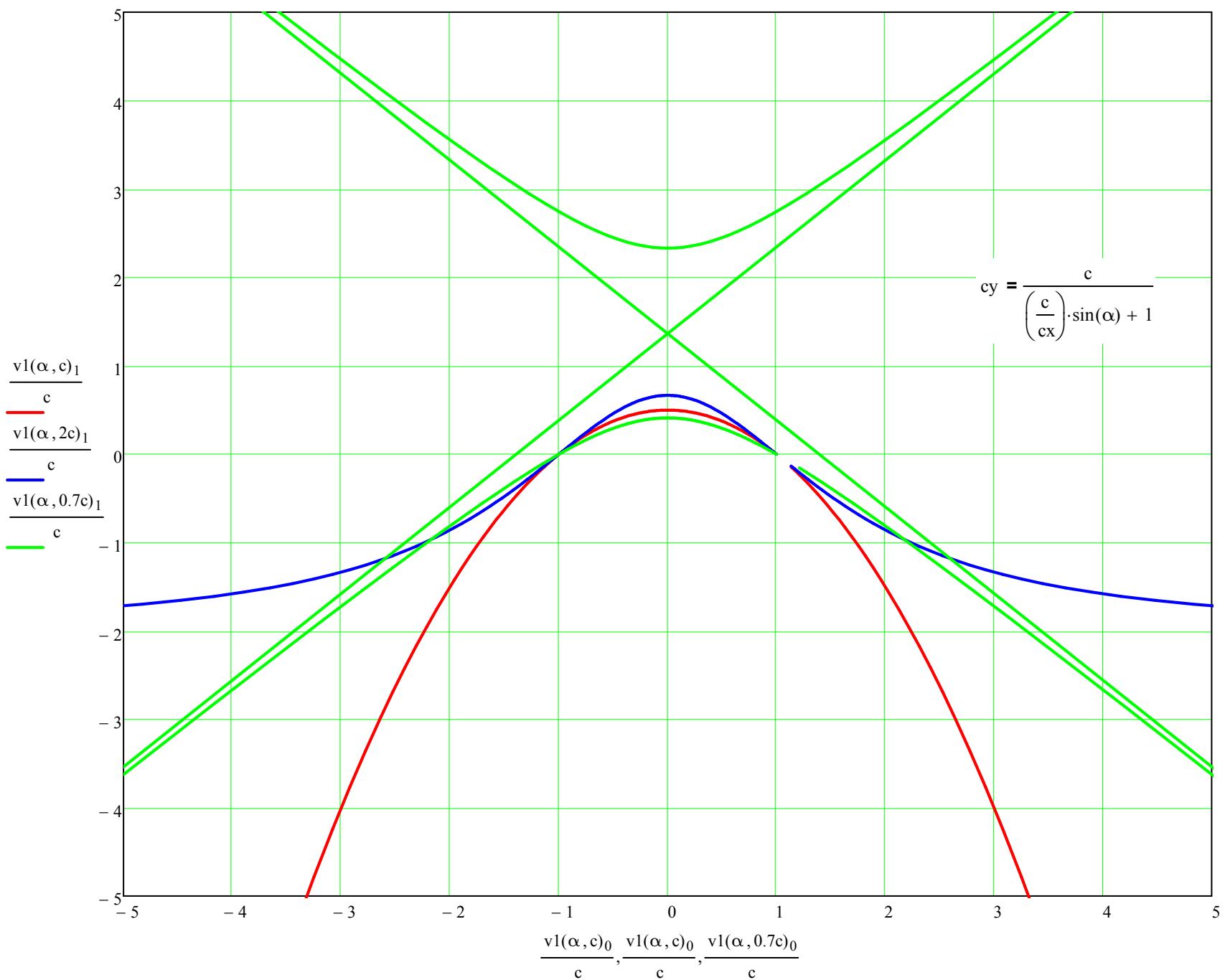
$$cy = \frac{c}{\left(\frac{c}{cx}\right) \cdot \sin(\alpha) + 1}$$

$$v1(\alpha, \text{chor}) := \begin{pmatrix} \cos(\alpha) \\ \sin(\alpha) \end{pmatrix} \cdot c2(\alpha, \text{chor})$$

$$\text{chor} := 2c$$

$$\alpha := 0, 0 + \frac{\pi}{100} .. 2\pi \cdot 0.98$$

lspeed as function of α for a given one way light speed in x direction and resulting speed in y direction



$$\alpha := 0, \frac{\pi}{4} + 0.00000001.. \pi$$

$$\text{chor} = 6 \times 10^8$$

$$c = 3 \times 10^8$$

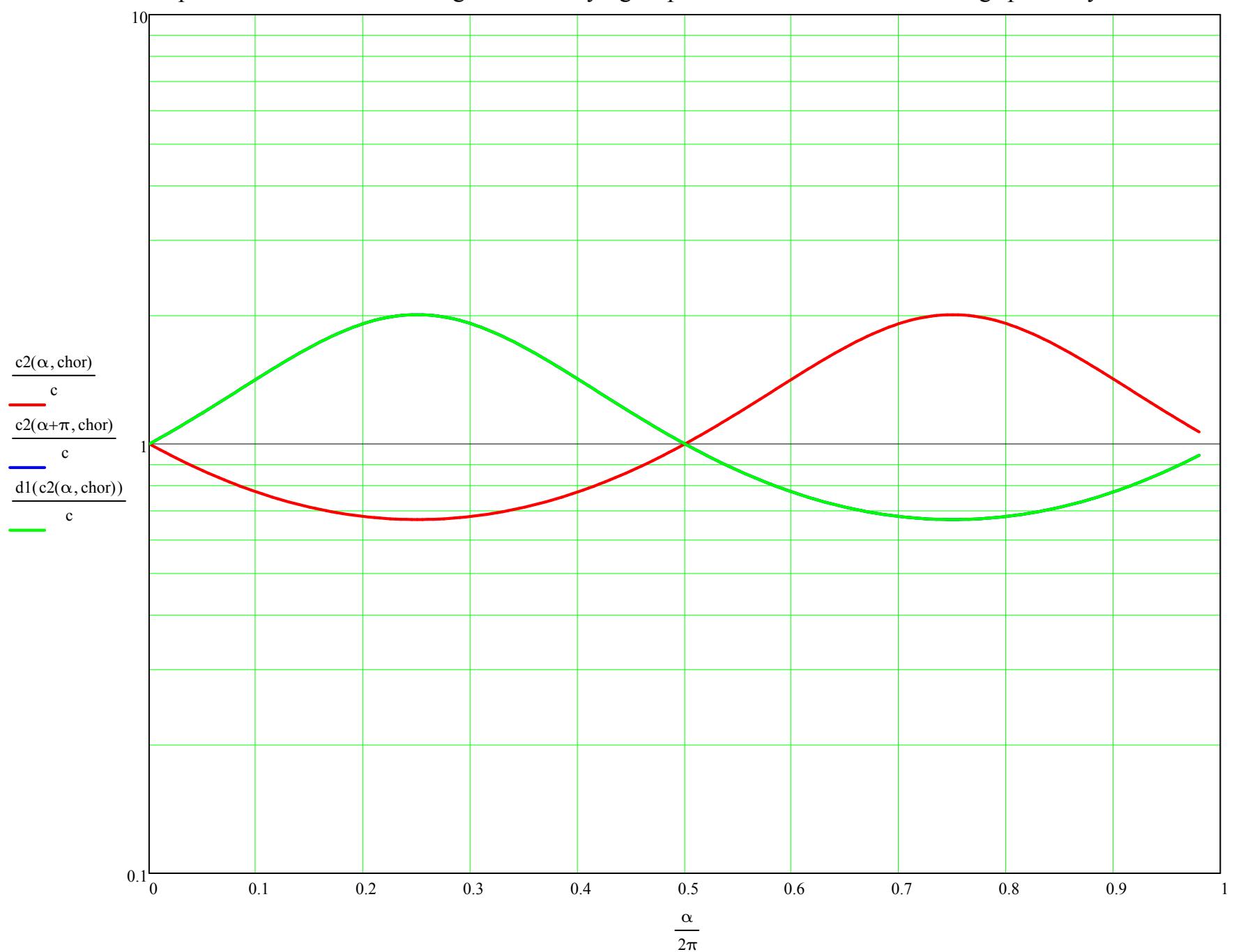
$$\frac{c2(\alpha, \text{chor})}{c} = \begin{pmatrix} 1 \\ 0.739 \\ 0.667 \\ 0.739 \end{pmatrix}$$

$$\frac{c2(\alpha + \pi, \text{chor})}{c} = \begin{pmatrix} 1 \\ 1.547 \\ 2 \\ 1.547 \end{pmatrix}$$

$$\frac{d1(c2(\alpha, \text{chor}))}{c} = \begin{pmatrix} 1 \\ 1.547 \\ 2 \\ 1.547 \end{pmatrix}$$

$$\alpha := 0, 0 + \frac{\pi}{100} .. 2\pi \cdot 0.98$$

lspeed as function of α for a given one way light speed in x direction and resulting speed in y direction



$$d1(c1) := \frac{c1}{2 \cdot \frac{c1}{c} - 1} \quad d1 = \frac{c1}{2 \cdot \frac{c1}{c} - 1}$$

$$\left(\frac{\frac{c1}{c}}{2 \cdot \frac{c1}{c} - 1} \right)_{c1}$$

$$-\frac{c}{c - 2 \cdot c1}$$

$$\frac{d1}{c1} = \frac{c}{c - 2 \cdot c1}$$

$$c1dir(k) := \begin{cases} c1 \leftarrow \frac{1}{1 - k} \\ d1 \leftarrow \frac{1}{1 + k} \\ c1dir_0 \leftarrow c1 \\ c1dir_1 \leftarrow d1 \\ c1dir \end{cases}$$

$$c1dir(0) = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$$

$$k := 0, 0.02..1$$

1 way light speeds as function of k

