



$$\frac{w}{a} = \frac{v + L \sin \theta}{L \cos \theta}$$

$$\frac{w}{b} = \frac{v + L \cos \theta}{L \sin \theta}$$

$\xrightarrow{\text{solve}} (v, w, \theta)$

$$\frac{w}{c} = \frac{v}{L}$$

\downarrow fix: v, w, θ
 $a, b, c \rightarrow A, B, C$
 $L, L, L \rightarrow X, Y, Z$

$$\frac{w}{A} = \frac{v}{X \cos \theta} + \tan \theta$$

$$\frac{w}{B} = \frac{v}{Y \sin \theta} + \cot \theta$$

$$\frac{w}{C} = \frac{v}{Z}$$

\downarrow

$$X = \frac{v}{\cos \theta} \left(\frac{w}{A} - \tan \theta \right)^{-1}$$

$$Y = \frac{v}{\sin \theta} \left(\frac{w}{B} - \cot \theta \right)^{-1}$$

$$Z = v \cdot \frac{C}{w}$$