



$$\tan(\alpha) = \frac{d}{w_1 + w_2}$$

$$w_1 = \frac{d}{\tan(\pi - \frac{\theta}{2})}$$

$$\tan(\frac{\theta}{2}) = \frac{(\cancel{w_2}/2)}{L}$$

$$2 \cdot L \cdot \tan(\frac{\theta}{2}) \geq w_2$$

$$\tan(\alpha) = \frac{d}{\frac{d}{\tan(\pi - \frac{\theta}{2})} + 2L \cdot \tan(\frac{\theta}{2})}$$

$$\lim_{d \rightarrow \infty} \frac{d}{\frac{d}{\tan(\pi - \frac{\theta}{2})} + 2L \cdot \tan(\frac{\theta}{2})} = -\tan(\frac{\theta}{2}) = \tan(-\frac{\theta}{2})$$

$$\text{at infinity, } \alpha = -\frac{\theta}{2} = \pi - \frac{\theta}{2}$$