



$$c = \frac{b}{\cos(\theta)}$$

$$X_2 = X_1 \cos(\theta)$$

$$X = \text{lenEXT} - X_2$$

$$a = \sqrt{\frac{wh}{\pi}}$$

a = mouth radius from mouth area
 h = mouth height w = mouth width

$r = \text{finder}(X, a)$ $\text{finder}()$ is reverse Tractrix formula
 (give len, get r)

$$\text{area} = \pi r^2$$

$$h_3 = X_2 \tan(\theta)$$

$$w_3 = \frac{\text{area}}{2 h_3}$$

See: www.jescities.com/agala.votti/Tractrix.html