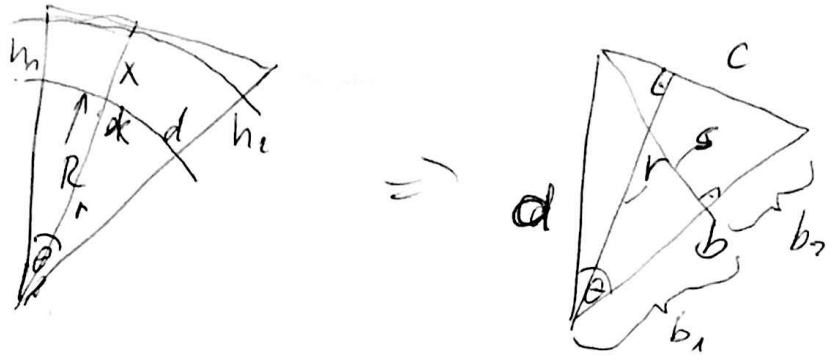
(h1+h2)



$a = R + h_1$

$b = R + h_2$

$x = r - R$

$\theta = d / R$

$b_1 = a \cdot \cos(\theta)$ $\quad b_2 = b - b_1$

$s = a \cdot \sin(\theta)$

$2A = \frac{1}{2} b \cdot s = \frac{1}{2} c \cdot r$

$r = \frac{b \cdot s}{c}$ $\quad c^2 = s^2 + (\overbrace{b - b_1}^{b_2})^2$

$$r = \frac{b \cdot a \cdot \sin(\theta)}{\sqrt{[a \cdot \sin(\theta)]^2 + [b - a \cdot \cos(\theta)]^2}}$$

$a = R + h_1$

$b = R + h_2$

$\theta = d / R$

$X = r - R$

$$r = \frac{a \cdot b \cdot \sin(\theta)}{\sqrt{[a \cdot \sin(\theta)]^2 + [b - a \cdot \cos(\theta)]^2}}$$

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if $a = b = R$

$$r = \frac{R^2 \cdot \sin(\theta)}{\sqrt{(R^2 \cdot \sin^2\theta) + (R - R \cdot \cos\theta)^2}}$$

$R^2(1 - \cos\theta)^2$

$R^2(\sin^2\theta + (1 - \cos^2\theta))$

$(R\sin\theta)^2 + (R - R\cos\theta)^2$

$= R^2\sin^2\theta + R^2 - 2R\cos\theta + R^2\cos^2\theta$

$= R^2(\sin^2\theta - \cos^2\theta + 1 - \frac{2}{R}\cos\theta)$