(1) $\sin\alpha = \frac{z}{x}$

(2) $\sin\beta = \frac{z}{y}$

από (1) $x = \frac{z}{\sin\alpha}$

(3) $x + y = R_1 + \frac{d}{2}$

(4) $y^2 + z^2 = R_1'^2$

$\cos\beta = \frac{y}{R_1}$

$z^2 + y^2 = R_1'^2$

από (2) $\tan\alpha = \frac{z}{x}$ $\quad x = \frac{z}{\tan\alpha}$

αντ(3) $\frac{z}{\tan\alpha} + y = R_1 + \frac{d}{2}$

(3α) $y = R_1 + \frac{d}{2} - \frac{z}{\tan\alpha}$ $\quad$ από $b - \frac{z}{a}$

$b = R_1 + \frac{d}{2}$ $\quad a = \tan\alpha$

$\tan\beta = \frac{z}{y}$

(3α) in

(4) $\left(b - \frac{z}{a}\right)^2 + z^2 = R_1'^2$

$b^2 - 2z\frac{b}{a} + \frac{z^2}{a^2} + z^2 = R_1'^2$