

$$(a+b)\frac{R_1}{R} = \frac{2a}{c}x + \frac{b-a}{c^2}x^2,$$

$$\frac{b-a}{c^2}x^2 + \frac{2a}{c}x - (a+b)\frac{R_1}{R} = 0.$$

$$x = \frac{-\frac{2a}{c} \pm \sqrt{\frac{4a^2}{c^2} + 4\frac{b-a}{c^2}(a+b)\frac{R_1}{R}}}{2\frac{b-a}{c^2}}.$$