



$$a' \tau = k a - 1 + \frac{1}{200} \left( \frac{1}{1+a/a} - 1 \right) + \frac{1}{200}$$

$$a' \tau = k - 1 + \frac{1}{200} \frac{a/a}{1+a/a}$$

$$\tau = \frac{k-1}{a'} + \frac{1}{200} \frac{1/a}{1+a/a}$$

$$\tau = \frac{1}{2200a} + \frac{1}{200a} \frac{1}{1+(k-1)200}$$

$$\boxed{a' = 2(k-1)200a}$$

$$\tau =$$