

$$\psi\left(\frac{a^2}{r'}\right) = -\psi(r') \left( \frac{\partial f}{\partial r} \right)_{r=a} \left( \frac{r'}{a} \right)^2.$$

This indicates that

$$M = \int_a^\infty \psi(z') \left[ f(r^2, r'^2, rr') - \left( \frac{\partial f}{\partial r} \right)_{r=a} f_1\left(r^2, \frac{a^4}{r'^2}, \frac{a^2}{r'}\right) \right] dr'.$$

Analogous transformations are made for all integrals with respect to  $r'$ ; however, since  $\left( \frac{\partial f}{\partial r} \right)_{r=a}$  is a function not only of  $\varphi'$  and  $\lambda'$  but of  $\varphi$  and  $\lambda$ , the solution of this holds only for the local problem, when  $\varphi$  and  $\lambda$  in this factor can be considered equal to  $\varphi_0$  and  $\lambda_0$ , i.e., constant.

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