

$$\partial^2 \frac{\partial t_1^2 f(t_0, t_1) = b^{a-1} \left(\frac{\partial^2}{\partial t_1^2} ab \log(b) + a' \cdot 2 \log(b) + a' b \frac{2}{b} + 2 \frac{\partial}{\partial t_1} a \right) + b^{a-2} \left(\frac{\partial}{\partial t_1} ab \log(b) + (a-2) \right) (a' b \log(b) + 2a)}{\partial t_1^2}$$