

$$\begin{aligned} ((\lambda a.(\lambda b.bb)(\lambda b.bb))b)((\lambda c.(cb))(\lambda a.a)) &= \\ ((\lambda a.(\lambda b.bb)(\lambda b.bb))b)((\lambda a.a)b) &= \\ ((\lambda a.(\lambda b.bb)(\lambda b.bb))b)b &= \\ ((\lambda b.bb)(\lambda b.bb))b &\quad (\text{нормальной формы нет}) \end{aligned}$$