$$\int_{-4 \text{ sec}}^{-4 \text{ sec}} \int_{-4 \text{ sec}}^{-4 \text{ sec}} f(a,b) \times \alpha ; \quad f(a,b) \begin{cases} a + \frac{1-a}{b}t & \text{if } t \leq b \\ 0 & \text{otherwise} \end{cases}$$