1. $\iiint_V n(M,t).d\tau = -\iint_S \overrightarrow{j}(M,t) \cdot d\overrightarrow{S} = -\iiint_V div\,\overrightarrow{j}\, d\tau$

2. $\dfrac{\partial n}{\partial t} + div\,\overrightarrow{j} = 0$, ce qui donne ici $j = \dfrac{A}{r}$