[nex29] **Drift equation.**

Prove that the Fokker-Planck equation with no diffusive term,

$$\frac{\partial}{\partial t} P(x,t|x_0) = -\frac{\partial}{\partial x} [A(x,t)P(x,t|x_0)],$$

has a solution of the form $P(x,t|x_0) = \delta\left(x - x_S(t)\right)$, where $x_S(t)$ is the solution of the deterministic equation of motion $dx/dt = A(x,t)$ with initial condition $x_S(0) = x_0$.