\[ \frac{d\beta}{d\beta} = 2\alpha \frac{dH}{d\alpha} = 0 \]

Solution: \( \alpha = \text{constant} \)
\( \beta = \text{constant} \)

\( \beta = \frac{2E}{\alpha} \)

Solve this, then \( q_1, \ldots, q_5 \) can be expressed in time and as constants \( \alpha, \beta \).

Example: harmonic oscillator

\[ \frac{\partial S}{\partial t} + \frac{1}{2} q^2 + \frac{1}{2} p^2 = 0 \quad \rho = \frac{\partial S}{\partial \rho} \]

His time independent \( \Rightarrow \) \( S = S_0 - ET \)

\[ \Rightarrow H = \frac{\partial S}{\partial t} = E \]

and \( \frac{1}{2} q^2 + \frac{1}{2} \left( \frac{\partial S}{\partial \rho} \right)^2 = E \)

\[ \Rightarrow S_0 = \int_{q_0}^{q_1} \left( 2E - q^2 \right)^{\frac{1}{2}} dq \quad \text{Complete Integral} \]

\[ \beta = \frac{\partial S}{\partial \alpha} = \int_{q_0}^{q_1} \frac{dq}{2E - q^2} - t \]

\[ \Rightarrow \beta + t = \int_{q_0}^{q_1} \frac{dq}{\sqrt{2E - q^2}} \]

\[ \uparrow - t_0 \]