$$\overset{\mathbb{I}}{\underset{\infty}{\triangle}} Q = \left\{ \mathbb{I} \xrightarrow[\text{diff}]{\text{ʅ}} Q \right\}$$

$$\underline{\overset{\mathbb{I}}{\underset{\infty}{\triangle}} Q}_{\text{ʅ}} = \overset{\mathbb{I}}{\underset{\infty}{\triangle}} \underset{-}{Q} = \left\{ \mathbb{I} \xrightarrow[\text{diff}]{\dot{\text{ʅ}}} \underset{-}{Q} \right\}$$

$$t|q|\,\underset{-}{q} \in \mathbb{I}\times Q\times \underset{-}{Q} \xrightarrow[\text{Lagr-Dichte}]{\mathcal{L}} \mathbb{R} \ni {}^{q|\underset{-}{q}}\mathcal{L}_t$$

$${}^{\text{ʅ}}\mathcal{L}_t = {}^{{}^{t}\text{ʅ}|{}^{t}\text{ʅ}}_{-}\mathcal{L}_t$$

$${}^{\text{ʅ}}\mathcal{L} = \int\limits_{dt}^{\mathbb{I}} {}^{{}^{t}\text{ʅ}|{}^{t}\text{ʅ}}_{-}\mathcal{L}_t = \int\limits_{dt}^{\mathbb{I}} {}^{\text{ʅ}}\mathcal{L}_t$$

$$\int\limits_{dt}^{\mathbb{I}} {}^{t}\dot{\text{ʅ}}^{\,i\,\text{ʅ}}\overbrace{\partial\mathcal{L}}^{t|i} = \dot{\text{ʅ}}\,{}^{\text{ʅ}}\underline{\mathcal{L}} = \int\limits_{dt}^{\mathbb{I}} \dot{\text{ʅ}}\,{}^{\text{ʅ}}\underline{{}^{t}\mathcal{L}}$$

$${}_{t|i}\partial\boxed{\boxed{\iota}} = {}_i^t\boxed{{}^t\iota|{}^t\underline{\iota}} - \frac{d}{dt}\,{}_i^t\boxed{{}^t\iota|{}^t\underline{\iota}}^0$$

$$\iota \in {}^{\mathbb{I}}\underset{\infty}{\triangle} Q \xrightarrow{{}_t\mathcal{L}} \mathbb{R} \ni {}^{{}^t\iota|{}^t\underline{\iota}}\mathcal{L}_t$$

$${}^{\mathbb{I}}\underset{\infty}{\triangle}\underline{Q} \xrightarrow[\text{lin}]{\overset{\iota}{\underline{{}_t\mathcal{L}}}} \mathbb{R}$$

$${}^t\boxed{\iota+\varepsilon\dot\iota} = {}^t\boxed{{}^t\iota+\varepsilon{}^t\dot\iota|{}^t\underline{\iota}+\varepsilon{}^t\dot{\underline{\iota}}}$$

$$\dot\iota\,\underline{\underline{{}^t\boxed{\iota}}} = \frac{d}{d\varepsilon}\,{}^t\boxed{\iota+\varepsilon\dot\iota} = \frac{d}{d\varepsilon}\,{}^t\boxed{{}^t\iota+\varepsilon{}^t\dot\iota|{}^t\underline{\iota}+\varepsilon{}^t\dot{\underline{\iota}}} = {}^t\dot\iota^i\,{}_i^t\boxed{{}^t\iota|{}^t\underline{\iota}} + {}^t\dot{\underline{\iota}}^i\,{}_i^t\boxed{{}^t\iota|{}^t\underline{\iota}}^0 = {}^t\dot\iota^i\frac{\partial}{\partial q^i}\,{}^t\boxed{{}^t\iota|{}^t\underline{\iota}} + {}^t\dot{\underline{\iota}}^i\frac{\partial}{\partial \dot q^i}\,{}_i^t\boxed{{}^t\iota|{}^t\underline{\iota}}^0$$

$$\boxed{\boxed{\iota}} = \int_{dt}^{\mathbb{I}} {}^t\boxed{\iota} \Longrightarrow$$

$$\int_{dt}^{\mathbb{I}} {}^t\dot\iota^i\,{}_i\boxed{\boxed{\iota}}_t = \dot\iota\,\underline{\underline{\boxed{\boxed{\iota}}}} = \int_{dt}^{\mathbb{I}} \dot\iota\,\underline{{}^t\boxed{\iota}} = \int_{dt}^{\mathbb{I}} {}^t\dot\iota^i\,{}_i^t\boxed{{}^t\iota|{}^t\underline{\iota}} + {}^t\dot{\underline{\iota}}^i\,{}_i^t\boxed{{}^t\iota|{}^t\underline{\iota}}^0$$

$$\underset{\partial_{\mathbb{I}}\dot\iota=0}{=} \int_{dt}^{\mathbb{I}} {}^t\dot\iota^i\,{}_i^t\boxed{{}^t\iota|{}^t\underline{\iota}} - {}^t\dot\iota^i\frac{d}{dt}\,{}_i^t\boxed{{}^t\iota|{}^t\underline{\iota}}^0 = \int_{dt}^{\mathbb{I}} {}^t\dot\iota^i\,\underbrace{{}_i^t\boxed{{}^t\iota|{}^t\underline{\iota}} - \frac{d}{dt}\,{}_i^t\boxed{{}^t\iota|{}^t\underline{\iota}}^0}$$

$$\text{motion } \frac{d}{dt}\,\dot{\partial}_\alpha\,\mathcal{L}_q \;=\; \partial_\alpha\,\mathcal{L}_q$$

$$\overset{t}{\boxed{q:}} \;=\; \boxed{t{:}\overset{t}{q}{:}\dot{\overset{t}{q}}}$$

$$\underline{q}\;\overset{t}{\underline{\mathcal{L}}}_q \;=\; \overset{t}{\underline{q}}{}^{\alpha}\,\partial_\alpha\,\overset{t}{\mathcal{L}}\left(\overset{t}{q}{:}\dot{\overset{t}{q}}\right) + \dot{\overset{t}{\underline{q}}}{}^{\alpha}\,\dot{\partial}_\alpha\,\overset{t}{\mathcal{L}}\left(\overset{t}{q}{:}\dot{\overset{t}{q}}\right) \;=\; \overset{t}{\underline{q}}{}^{\alpha}\,\underset{\alpha}{\boxed{t{:}\overset{t}{q}{:}\overset{t}{\underline{q}}}} + \dot{\overset{t}{\underline{q}}}{}^{\alpha}\,\underset{\alpha}{\boxed{t{:}\overset{t}{q}{:}\overset{t}{\underline{q}}}}^{0}$$

$$\underline{q}\;\underbrace{\int^{dt}\overset{t}{\mathcal{L}}}_{q} \;=\; \int^{dt}\underline{q}\;\overset{t}{\underline{\mathcal{L}}}_q \;=\; \int^{dt}\overset{t}{\underline{q}}{}^{\alpha}\,\underset{\alpha}{\boxed{t{:}\overset{t}{q}{:}\overset{t}{\underline{q}}}} + \int^{dt}\dot{\overset{t}{\underline{q}}}{}^{\alpha}\,\underset{\alpha}{\boxed{t{:}\overset{t}{q}{:}\overset{t}{\underline{q}}}}^{0} \;=\; \int^{dt}\overset{t}{\underline{q}}{}^{\alpha}\,\underset{\alpha}{\boxed{t{:}\overset{t}{q}{:}\overset{t}{\underline{q}}}} - \int^{dt}\overset{t}{\underline{q}}{}^{\alpha}\,\frac{d}{dt}\,\underset{\alpha}{\boxed{t{:}\overset{t}{q}{:}\overset{t}{\underline{q}}}}^{0}$$

$$= \int^{dt}\overset{t}{\underline{q}}{}^{\alpha}\,\underbrace{\underset{\alpha}{\boxed{t{:}\overset{t}{q}{:}\overset{t}{\underline{q}}}} - \frac{d}{dt}\,\underset{\alpha}{\boxed{t{:}\overset{t}{q}{:}\overset{t}{\underline{q}}}}^{0}}_{=\,0}$$

$$\mathbb{I}\underset{\infty}{\overset{\mathcal{L}}{\blacktriangleright}}Q \;=\; \frac{\mathbb{I}\xrightarrow[\text{diff}]{\text{ʅ}}Q}{\overset{\text{ʅ}}{\underline{\mathcal{L}}} = 0} \;=\; \frac{\mathbb{I}\xrightarrow[\text{diff}]{\text{ʅ}}Q}{\bigwedge_t\bigwedge_i\;\underset{i}{\overset{t}{\boxed{\text{ʅ}:}}} = \underset{i}{\boxed{t{:}\overset{t}{\text{ʅ}}{:}\overset{t}{\underline{\text{ʅ}}}}} = \frac{d}{dt}\,\underset{i}{\boxed{t{:}\overset{t}{\text{ʅ}}{:}\overset{t}{\underline{\text{ʅ}}}}}^{0} = \frac{d}{dt}\,\underset{i}{\overset{t}{\boxed{\text{ʅ}:}}}^{0}}$$

$$\overset{\text{ʅ}}{\underline{\mathcal{L}}} = 0 \Leftrightarrow \bigwedge_{\text{ɾ}\,\in\,\mathbb{I}\underset{\infty}{\blacktriangleright}\underline{Q}} 0 = \text{ɾ}\,\overset{\text{ʅ}}{\underline{\mathcal{L}}} = \int_{dt}^{\mathbb{I}}\overset{t}{\text{ɾ}}\,\overset{\text{ʅ}}{\widetilde{\partial\mathcal{L}}}_t \;=\; \int_{dt}^{\mathbb{I}}\overset{t}{\text{ɾ}}{}^{i}\,\overset{\text{ʅ}}{\widetilde{\partial\mathcal{L}}}_{t:i}$$

$$\Leftrightarrow \bigwedge_t 0 = \overset{\text{ʅ}}{\widetilde{\partial\mathcal{L}}}_t \Leftrightarrow \bigwedge_t\bigwedge_i 0 = \overset{\text{ʅ}}{\widetilde{\partial\mathcal{L}}}_{t:i} \;=\; \underset{i}{\boxed{t{:}\overset{t}{\text{ʅ}}{:}\overset{t}{\underline{\text{ʅ}}}}} - \frac{d}{dt}\,\underset{i}{\boxed{t{:}\overset{t}{\text{ʅ}}{:}\overset{t}{\underline{\text{ʅ}}}}}^{0}$$

$$\Leftrightarrow \bigwedge_t\bigwedge_i\;\underset{i}{\boxed{t{:}\overset{t}{\text{ʅ}}{:}\overset{t}{\underline{\text{ʅ}}}}} = \frac{d}{dt}\,\underset{i}{\boxed{t{:}\overset{t}{\text{ʅ}}{:}\overset{t}{\underline{\text{ʅ}}}}}^{0}$$