Duff

$$\text{Sugra} \begin{cases} D10 \\ N1 \end{cases}$$

$$\mathbb{R}^{1:9} \ni x^0 \cdot\cdot x^9$$

$$\cancel{k}^{+} = \cancel{p}_{M_0 \cdot\cdot M_k} \underline{x}^{M_0} \wedge \cdots \wedge \underline{x}^{M_k}$$

$$\mathcal{L}^k \left(g{:}\phi{:}\cancel{k}^{+}\right) = \sqrt{-g} \left(R - \frac{1}{2} \overbracket{\phi}^{2} - \frac{1}{(k+2)!2} \overbracket{\underset{-}{\cancel{k}^{+}}}^{2} \mathfrak{e}^{-\alpha\phi} \right)$$

$$\alpha = (-1)^k \frac{k-3}{2}$$

$$^{t:x}\bcancel{k}_{+} = \bcancel{k}_{+}^{0} : \cdots : \bcancel{k}_{+}^{9}$$

$$\mathcal{L}_k^{g:\phi:\cancel{k}^{+}} \left(\gamma{:}\bcancel{k}_{+}\right) = \frac{1}{2}\sqrt{-\gamma} \left(k - 1 - \gamma^{ij} \left(\bcancel{k}^{+} \ltimes g\right)_{ij} \exp\left(-\sqrt{\frac{1-k}{1+k} + \frac{1}{d-1}}\phi \right) \right) - \bcancel{k}_{+} \ltimes \cancel{k}^{+}$$

$$p = 1{:}q = 5 \Longrightarrow \alpha = 1$$

$$\mathcal{L}^k \left(g{:}\phi{:}\cancel{2}\right) = \sqrt{-g} \left(R - \frac{1}{2} \overbracket{\phi}^{2} - \frac{1}{3!2} \overbracket{\underset{-}{\cancel{2}}}^{2} \mathfrak{e}^{-\phi} \right)$$

$$\mathcal{L}^k \left(g{:}\phi{:}\cancel{6}\right) = \sqrt{-g} \left(R - \frac{1}{2} \overbracket{\phi}^{2} - \frac{1}{7!2} \overbracket{\underset{-}{\cancel{6}}}^{2} \mathfrak{e}^{\phi} \right)$$