$$\frac{\mathrm{d}}{\mathrm{d}\lambda}\tau(\lambda)\Big|_{\lambda=0} = \sum_{n=1}^{N} \dots \left(\begin{array}{c} n-1 & n & n+1 & n+2 \\ L'(0) & & & \\ & & \\ & & & \\ & & & \\ & & \\ & & & \\ &$$