

$$\mathrm{d}\left[\eta,k\right]=d_k^{(n)}+\mathcal{O}^*\left(f_{3n/2-k}\frac{\sqrt{2\pi}}{128}\frac{(\pi a^2/8)^{n/2}}{\Gamma((3n-2k+1)/2)}\frac{2^{2k}\epsilon_4}{\phantom{f_{3n/2-k}}}\right).$$