$$a_n(2) \approx -1.478 \log(n+1) + 2.071 \log(n+2) - 0.1024 - 1.333/(n+1) . \tag{25}$$

For large n the exact $a_n(2)$ grows like A log n + B+ $O(\frac{1}{n})$. The approximation adopted in Eq. (25) gets the coefficients A and B right. It also incorporates the exact residue for the pole at n=-1, and it satisfies $a_o(2)=0$.

The exponent function $a_n(3)$, relevant for F_3, has properties similar to those of $a_n(2)$, though with different numerical coefficients: a log n growth for large n, a zero at n = 0, and a pole at n = -1. The following expression incorporates these key features and represents a reasonable approximation to the exact results:

$$a_n(3) \approx 0.5926 \log(n+2) - 0.1144 - 0.2963/(n+1). \tag{26}$$

We shall have some comments to make in the next section about the longitudinal structure function F_L. For the purposes of this section, however, we accept that F_L/F_2 for electroproduction is already small compared to unity in the q^2 region of the SLAC-MIT experiments.[1] Moreover, the ratio is predicted to vanish as $q^2 \to \infty$, in the model under discussion as well as in the simple quark-parton model. We shall suppose that F_L/F_2 is also already small at modest values of q^2 in the case of the neutrino reactions.