

$$a_1(\nu) = \frac{5}{2} \left(\frac{77}{2} + \left(\frac{41}{64} \pi^2 - \frac{125}{3} \right) \nu + \frac{7}{4} \nu^2 \right)$$

$$a_2(\nu) = \frac{105}{2} + \left(\frac{41}{64} \pi^2 - \frac{218}{3} \right) \nu + \frac{45}{6} \nu^2$$

$$a_3(\nu) = \frac{1}{4} (5 - 5\nu + 4\nu^2)$$

$$a_4(\nu) = \frac{5}{128} (21 - 105\nu + 15\nu^2 + 5\nu^3)$$