

$$\begin{aligned}a_0 + 4a_1 + a_2 &= 4 \cdot 6(\cancel{0} - 2 \cdot \frac{1}{2} + \cancel{0}) \\&= 24 \cdot (-1) \\&= -24\end{aligned}$$

$$a_0 = -24 - 4a_1 - a_2$$

$$a_1 = \frac{1}{4}(-24 - a_0 - a_2)$$

$$a_2 = -24 - 4a_1 - a_0$$