Table 1: The cases $k \equiv 0 \pmod 4$ in the proof of Theorem 3.1

Case	(n, n_0, k)	$f(m)$
1.1.1	$(0,0,0)$	$m^2 + (-48k_0m_0 - 48m_0^2 - 6m_0 + 2)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 192k_0m_0^2 - 50k_0m_0 + 144m_0^4 + 576m_0^3 + 144m_0^2 - 47m_0^2 - 8m_0 + 1$
1.1.2	$(1,0,0)$	$m^2 + (-48k_0m_0 - 12k_0 - 48m_0^2 - 30m_0 - 3)m + 576k_0^2m_0^2 + 336k_0^2m_0 + 1152k_0m_0^3 + 576k_0m_0^2 + 274k_0m_0 + 22k_0 + 720m_0^3 + 289m_0^2 + 41m_0 + 2$
1.1.3	$(2,0,0)$	$m^2 + (-48k_0m_0 - 24k_0 - 48m_0^2 - 54m_0 - 13)m + 576k_0^2m_0^2 + 624k_0^2m_0 + 168k_0^2 + 1152k_0m_0^3 + 960k_0m_0^2 + 1006k_0m_0 + 167k_0 + 576m_0^4 + 1296m_0^3 + 1033m_0^2 + 341m_0 + 39$
1.1.4	$(3,0,0)$	$m^2 + (-48k_0m_0 - 36k_0 - 48m_0^2 - 78m_0 - 30)m + 576k_0^2m_0^2 + 912k_0^2m_0 + 360k_0^2 + 1152k_0m_0^3 + 1152k_0m_0^2 + 2194k_0m_0 + 567k_0 + 576m_0^4 + 1872m_0^3 + 2233m_0^2 + 1158m_0 + 220$
1.2.1	$(0,1,0)$	$m^2 + (-48k_0m_0 - 48m_0^2 - 6m_0 + 1)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 192k_0m_0^2 - 50k_0m_0 + 144m_0^4 + 576m_0^3 - 47m_0^2 - 6m_0 + 1$
1.2.2	$(1,1,0)$	$m^2 + (-48k_0m_0 - 12k_0 - 48m_0^2 - 30m_0)m + 576k_0^2m_0^2 + 336k_0^2m_0 + 1152k_0m_0^3 + 576k_0m_0^2 + 250k_0m_0 + 13k_0 + 576m_0^4 + 720m_0^3 + 265m_0^2 + 24m_0$
1.2.3	$(2,1,0)$	$m^2 + (-48k_0m_0 - 24k_0 - 48m_0^2 - 54m_0 - 13)m + 576k_0^2m_0^2 + 624k_0^2m_0 + 168k_0^2 + 1152k_0m_0^3 + 960k_0m_0^2 + 1006k_0m_0 + 167k_0 + 576m_0^4 + 1296m_0^3 + 1033m_0^2 + 343m_0 + 40$
1.2.4	$(3,1,0)$	$m^2 + (-48k_0m_0 - 36k_0 - 48m_0^2 - 78m_0 - 29)m + 576k_0^2m_0^2 + 912k_0^2m_0 + 360k_0^2 + 1152k_0m_0^3 + 1152k_0m_0^2 + 2170k_0m_0 + 546k_0 + 576m_0^4 + 1872m_0^3 + 2209m_0^2 + 1117m_0 + 204$
1.3.1	$(0,2,0)$	$m^2 + (-48k_0m_0 - 48m_0^2 - 6m_0 + 3)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 192k_0m_0^2 - 74k_0m_0 + 2k_0 + 144m_0^4 + 576m_0^3 - 71m_0^2 - 11m_0 + 2$
1.3.2	$(1,2,0)$	$m^2 + (-48k_0m_0 - 12k_0 - 48m_0^2 - 30m_0)m + 576k_0^2m_0^2 + 336k_0^2m_0 + 1152k_0m_0^3 + 576k_0m_0^2 + 250k_0m_0 + 16k_0 + 576m_0^4 + 720m_0^3 + 265m_0^2 + 26m_0$
1.3.3	$(2,2,0)$	$m^2 + (-48k_0m_0 - 24k_0 - 48m_0^2 - 54m_0 - 12)m + 576k_0^2m_0^2 + 624k_0^2m_0 + 168k_0^2 + 1152k_0m_0^3 + 960k_0m_0^2 + 982k_0m_0 + 155k_0 + 576m_0^4 + 1296m_0^3 + 1009m_0^2 + 314m_0 + 33$
1.3.4	$(3,2,0)$	$m^2 + (-48k_0m_0 - 36k_0 - 48m_0^2 - 78m_0 - 29)m + 576k_0^2m_0^2 + 912k_0^2m_0 + 360k_0^2 + 1152k_0m_0^3 + 1152k_0m_0^2 + 2170k_0m_0 + 549k_0 + 576m_0^4 + 1872m_0^3 + 2209m_0^2 + 1119m_0 + 206$
1.4.1	$(0,3,0)$	$m^2 + (-48k_0m_0 - 48m_0^2 - 6m_0 + 3)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 192k_0m_0^2 - 74k_0m_0 + 4k_0 + 144m_0^4 + 576m_0^3 - 71m_0^2 - 9m_0 + 2$
1.4.2	$(1,3,0)$	$m^2 + (-48k_0m_0 - 12k_0 - 48m_0^2 - 30m_0 - 1)m + 576k_0^2m_0^2 + 336k_0^2m_0 + 1152k_0m_0^3 + 576k_0m_0^2 + 226k_0m_0 + 7k_0 + 576m_0^4 + 720m_0^3 + 241m_0^2 + 9m_0 - 1$
1.4.3	$(2,3,0)$	$m^2 + (-48k_0m_0 - 24k_0 - 48m_0^2 - 54m_0 - 12)m + 576k_0^2m_0^2 + 624k_0^2m_0 + 168k_0^2 + 1152k_0m_0^3 + 960k_0m_0^2 + 982k_0m_0 + 155k_0 + 576m_0^4 + 1296m_0^3 + 1009m_0^2 + 316m_0 + 34$
1.4.4	$(3,3,0)$	$m^2 + (-48k_0m_0 - 36k_0 - 48m_0^2 - 78m_0 - 28)m + 576k_0^2m_0^2 + 912k_0^2m_0 + 360k_0^2 + 1152k_0m_0^3 + 1152k_0m_0^2 + 2146k_0m_0 + 528k_0 + 576m_0^4 + 1872m_0^3 + 2185m_0^2 + 1078m_0 + 190$
2.1.1	$(0,0,0)$	$(4k_0 + 4m_0 + 1)m - 48k_0^2m_0 - 4k_0^2 - 144k_0m_0^2 - 46k_0m_0 + 2k_0 - 96m_0^3 - 48m_0^2 - 3m_0 + 1$
2.1.2	$(1,0,0)$	$(4k_0 + 4m_0 + 1)m - 48k_0^2m_0 - 16k_0^2 - 144k_0m_0^2 - 94k_0m_0 - 10k_0 - 96m_0^3 - 96m_0^2 - 27m_0 - 2$
2.1.3	$(2,0,0)$	$(4k_0 + 4m_0 + 3)m - 48k_0^2m_0 - 28k_0^2 - 144k_0m_0^2 - 190k_0m_0 - 57k_0 - 96m_0^3 - 192m_0^2 - 123m_0 - 25$
2.1.4	$(3,0,0)$	$(4k_0 + 4m_0 + 3)m - 48k_0^2m_0 - 40k_0^2 - 144k_0m_0^2 - 238k_0m_0 - 93k_0 - 96m_0^3 - 240m_0^2 - 195m_0 - 52$
2.2.1	$(0,1,0)$	$(4k_0 + 4m_0)m - 48k_0^2m_0 - 4k_0^2 - 144k_0m_0^2 - 22k_0m_0 + 4k_0 - 96m_0^3 - 24m_0^2 + 4m_0$
2.2.2	$(1,1,0)$	$(4k_0 + 4m_0 + 2)m - 48k_0^2m_0 - 16k_0^2 - 144k_0m_0^2 - 118k_0m_0 - 19k_0 - 96m_0^3 - 120m_0^2 - 44m_0 - 4$
2.2.3	$(2,1,0)$	$(4k_0 + 4m_0 + 2)m - 48k_0^2m_0 - 28k_0^2 - 144k_0m_0^2 - 166k_0m_0 - 43k_0 - 96m_0^3 - 168m_0^2 - 92m_0 - 16$
2.2.4	$(3,1,0)$	$(4k_0 + 4m_0 + 4)m - 48k_0^2m_0 - 40k_0^2 - 144k_0m_0^2 - 262k_0m_0 - 114k_0 - 96m_0^3 - 264m_0^2 - 236m_0 - 68$
2.3.1	$(0,2,0)$	$(4k_0 + 4m_0 + 1)m - 48k_0^2m_0 - 4k_0^2 - 144k_0m_0^2 - 46k_0m_0 + 4k_0 - 96m_0^3 - 48m_0^2 - m_0 + 1$
2.3.2	$(1,2,0)$	$(4k_0 + 4m_0 + 1)m - 48k_0^2m_0 - 16k_0^2 - 144k_0m_0^2 - 94k_0m_0 - 8k_0 - 96m_0^3 - 96m_0^2 - 25m_0 - 2$
2.3.3	$(2,2,0)$	$(4k_0 + 4m_0 + 3)m - 48k_0^2m_0 - 28k_0^2 - 144k_0m_0^2 - 190k_0m_0 - 55k_0 - 96m_0^3 - 192m_0^2 - 121m_0 - 23$
2.3.4	$(3,2,0)$	$(4k_0 + 4m_0 + 3)m - 48k_0^2m_0 - 40k_0^2 - 144k_0m_0^2 - 238k_0m_0 - 91k_0 - 96m_0^3 - 240m_0^2 - 193m_0 - 50$
2.4.1	$(0,3,0)$	$(4k_0 + 4m_0)m - 48k_0^2m_0 - 4k_0^2 - 144k_0m_0^2 - 22k_0m_0 + 6k_0 - 96m_0^3 - 24m_0^2 + 6m_0$
2.4.2	$(1,3,0)$	$(4k_0 + 4m_0 + 2)m - 48k_0^2m_0 - 16k_0^2 - 144k_0m_0^2 - 118k_0m_0 - 17k_0 - 96m_0^3 - 120m_0^2 - 42m_0 - 3$
2.4.3	$(2,3,0)$	$(4k_0 + 4m_0 + 2)m - 48k_0^2m_0 - 28k_0^2 - 144k_0m_0^2 - 166k_0m_0 - 41k_0 - 96m_0^3 - 168m_0^2 - 90m_0 - 15$
2.4.4	$(3,3,0)$	$(4k_0 + 4m_0 + 4)m - 48k_0^2m_0 - 40k_0^2 - 144k_0m_0^2 - 262k_0m_0 - 112k_0 - 96m_0^3 - 264m_0^2 - 234m_0 - 66$
3.1.1	$(0,0,0)$	$-m^2 + (48k_0m_0 + 10k_0 + 48m_0^2 + 18m_0)m - 576k_0^2m_0^2 - 192k_0^2m_0 - 13k_0^2 - 1152k_0m_0^3 - 624k_0m_0^2 - 64k_0m_0 + 5k_0 - 576m_0^4 - 432m_0^3 - 73m_0^2 + 4m_0 + 1$
3.1.2	$(1,0,0)$	$-m^2 + (48k_0m_0 + 22k_0 + 48m_0^2 + 42m_0 + 7)m - 576k_0^2m_0^2 - 480k_0^2m_0 - 97k_0^2 - 1152k_0m_0^3 - 1488k_0m_0^2 - 580k_0m_0 - 64k_0 - 576m_0^4 - 1008m_0^3 - 601m_0^2 - 141m_0 - 11$
3.1.3	$(2,0,0)$	$-m^2 + (48k_0m_0 + 34k_0 + 48m_0^2 + 66m_0 + 21)m - 576k_0^2m_0^2 - 768k_0^2m_0 - 253k_0^2 - 1152k_0m_0^3 - 2352k_0m_0^2 - 1552k_0m_0 - 327k_0 - 576m_0^4 - 1584m_0^3 - 1585m_0^2 - 681m_0 - 106$
3.1.4	$(3,0,0)$	$-m^2 + (48k_0m_0 + 46k_0 + 48m_0^2 + 90m_0 + 40)m - 576k_0^2m_0^2 - 1056k_0^2m_0 - 481k_0^2 - 1152k_0m_0^3 - 3216k_0m_0^2 - 2932k_0m_0 - 870k_0 - 576m_0^4 - 2160m_0^3 - 2977m_0^2 - 1786m_0 - 394$
3.2.1	$(0,1,0)$	$-m^2 + (48k_0m_0 + 10k_0 + 48m_0^2 + 18m_0 - 1)m - 576k_0^2m_0^2 - 192k_0^2m_0 - 13k_0^2 - 1152k_0m_0^3 - 624k_0m_0^2 - 40k_0m_0 + 7k_0 - 576m_0^4 - 432m_0^3 - 49m_0^2 + 11m_0$
3.2.2	$(1,1,0)$	$-m^2 + (48k_0m_0 + 22k_0 + 48m_0^2 + 42m_0 + 7)m - 576k_0^2m_0^2 - 480k_0^2m_0 - 97k_0^2 - 1152k_0m_0^3 - 1488k_0m_0^2 - 580k_0m_0 - 64k_0 - 576m_0^4 - 1008m_0^3 - 601m_0^2 - 139m_0 - 10$
3.2.3	$(2,1,0)$	$-m^2 + (48k_0m_0 + 34k_0 + 48m_0^2 + 66m_0 + 20)m - 576k_0^2m_0^2 - 768k_0^2m_0 - 253k_0^2 - 1152k_0m_0^3 - 2352k_0m_0^2 - 1528k_0m_0 - 313k_0 - 576m_0^4 - 1584m_0^3 - 1561m_0^2 - 650m_0 - 97$
3.2.4	$(3,1,0)$	$-m^2 + (48k_0m_0 + 46k_0 + 48m_0^2 + 90m_0 + 40)m - 576k_0^2m_0^2 - 1056k_0^2m_0 - 481k_0^2 - 1152k_0m_0^3 - 3216k_0m_0^2 - 2932k_0m_0 - 870k_0 - 576m_0^4 - 2160m_0^3 - 2977m_0^2 - 1784m_0 - 392$
3.3.1	$(0,2,0)$	$-m^2 + (48k_0m_0 + 10k_0 + 48m_0^2 + 18m_0 - 1)m - 576k_0^2m_0^2 - 192k_0^2m_0 - 13k_0^2 - 1152k_0m_0^3 - 624k_0m_0^2 - 40k_0m_0 + 10k_0 - 576m_0^4 - 432m_0^3 - 49m_0^2 + 13m_0$
3.3.2	$(1,2,0)$	$-m^2 + (48k_0m_0 + 22k_0 + 48m_0^2 + 42m_0 + 6)m - 576k_0^2m_0^2 - 480k_0^2m_0 - 97k_0^2 - 1152k_0m_0^3 - 1488k_0m_0^2 - 556k_0m_0 - 53k_0 - 576m_0^4 - 1008m_0^3 - 577m_0^2 - 120m_0 - 8$
3.3.3	$(2,2,0)$	$-m^2 + (48k_0m_0 + 34k_0 + 48m_0^2 + 66m_0 + 20)m - 576k_0^2m_0^2 - 768k_0^2m_0 - 253k_0^2 - 1152k_0m_0^3 - 2352k_0m_0^2 - 1528k_0m_0 - 310k_0 - 576m_0^4 - 1584m_0^3 - 1561m_0^2 - 648m_0 - 95$
3.3.4	$(3,2,0)$	$-m^2 + (48k_0m_0 + 46k_0 + 48m_0^2 + 90m_0 + 39)m - 576k_0^2m_0^2 - 1056k_0^2m_0 - 481k_0^2 - 1152k_0m_0^3 - 3216k_0m_0^2 - 2908k_0m_0 - 847k_0 - 576m_0^4 - 2160m_0^3 - 2953m_0^2 - 1741m_0 - 374$
3.4.1	$(0,3,0)$	$-m^2 + (48k_0m_0 + 10k_0 + 48m_0^2 + 18m_0 - 2)m - 576k_0^2m_0^2 - 192k_0^2m_0 - 13k_0^2 - 1152k_0m_0^3 - 624k_0m_0^2 - 16k_0m_0 + 12k_0 - 576m_0^4 - 432m_0^3 - 25m_0^2 + 20m_0 - 1$
3.4.2	$(1,3,0)$	$-m^2 + (48k_0m_0 + 22k_0 + 48m_0^2 + 42m_0 + 6)m - 576k_0^2m_0^2 - 480k_0^2m_0 - 97k_0^2 - 1152k_0m_0^3 - 1488k_0m_0^2 - 556k_0m_0 - 53k_0 - 576m_0^4 - 1008m_0^3 - 577m_0^2 - 118m_0 - 7$
3.4.3	$(2,3,0)$	$-m^2 + (48k_0m_0 + 34k_0 + 48m_0^2 + 66m_0 + 19)m - 576k_0^2m_0^2 - 768k_0^2m_0 - 253k_0^2 - 1152k_0m_0^3 - 2352k_0m_0^2 - 1504k_0m_0 - 296k_0 - 576m_0^4 - 1584m_0^3 - 1537m_0^2 - 617m_0 - 87$
3.4.4	$(3,3,0)$	$-m^2 + (48k_0m_0 + 46k_0 + 48m_0^2 + 90m_0 + 39)m - 576k_0^2m_0^2 - 1056k_0^2m_0 - 481k_0^2 - 1152k_0m_0^3 - 3216k_0m_0^2 - 2908k_0m_0 - 847k_0 - 576m_0^4 - 2160m_0^3 - 2953m_0^2 - 1739m_0 - 372$
4.1.1	$(0,0,0)$	$(-4m_0 - 1)m + 48k_0^2m_0 + 12k_0^2 + 144k_0m_0^2 + 70k_0m_0 + 10k_0 + 96m_0^3 + 72m_0^2 + 15m_0 + 1$

1

Table 1 – continued from previous page

Case	(n, n_0, k)	$f(m)$
4.1.2	$(1,0,0)$	$(-4m_0-2)m + 48k_0^2 m_0 + 24k_0^2 + 144k_0 m_0^2 + 142k_0 m_0 + 35k_0 + 96m_0^3 + 144m_0^2 + 66m_0 + 9$
4.1.3	$(2,0,0)$	$(-4m_0-3)m + 48k_0^2 m_0 + 36k_0^2 + 144k_0 m_0^2 + 214k_0 m_0 + 81k_0 + 96m_0^3 + 216m_0^2 + 159m_0 + 38$
4.1.4	$(3,0,0)$	$(-4m_0-4)m + 48k_0^2 m_0 + 48k_0^2 + 144k_0 m_0^2 + 286k_0 m_0 + 142k_0 + 96m_0^3 + 288m_0^2 + 282m_0 + 90$
4.2.1	$(0,1,0)$	$(-4m_0-1)m + 48k_0^2 m_0 + 12k_0^2 + 144k_0 m_0^2 + 70k_0 m_0 + 7k_0 + 96m_0^3 + 72m_0^2 + 11m_0$
4.2.2	$(1,1,0)$	$(-4m_0-2)m + 48k_0^2 m_0 + 24k_0^2 + 144k_0 m_0^2 + 142k_0 m_0 + 35k_0 + 96m_0^3 + 144m_0^2 + 68m_0 + 10$
4.2.3	$(2,1,0)$	$(-4m_0-3)m + 48k_0^2 m_0 + 36k_0^2 + 144k_0 m_0^2 + 214k_0 m_0 + 78k_0 + 96m_0^3 + 216m_0^2 + 155m_0 + 35$
4.2.4	$(3,1,0)$	$(-4m_0-4)m + 48k_0^2 m_0 + 48k_0^2 + 144k_0 m_0^2 + 286k_0 m_0 + 142k_0 + 96m_0^3 + 288m_0^2 + 284m_0 + 92$
4.3.1	$(0,2,0)$	$(-4m_0-1)m + 48k_0^2 m_0 + 12k_0^2 + 144k_0 m_0^2 + 70k_0 m_0 + 10k_0 + 96m_0^3 + 72m_0^2 + 13m_0$
4.3.2	$(1,2,0)$	$(-4m_0-2)m + 48k_0^2 m_0 + 24k_0^2 + 144k_0 m_0^2 + 142k_0 m_0 + 35k_0 + 96m_0^3 + 144m_0^2 + 64m_0 + 8$
4.3.3	$(2,2,0)$	$(-4m_0-3)m + 48k_0^2 m_0 + 36k_0^2 + 144k_0 m_0^2 + 214k_0 m_0 + 81k_0 + 96m_0^3 + 216m_0^2 + 157m_0 + 37$
4.3.4	$(3,2,0)$	$(-4m_0-4)m + 48k_0^2 m_0 + 48k_0^2 + 144k_0 m_0^2 + 286k_0 m_0 + 142k_0 + 96m_0^3 + 288m_0^2 + 280m_0 + 88$
4.4.1	$(0,3,0)$	$(-4m_0-1)m + 48k_0^2 m_0 + 12k_0^2 + 144k_0 m_0^2 + 70k_0 m_0 + 7k_0 + 96m_0^3 + 72m_0^2 + 9m_0 - 1$
4.4.2	$(1,3,0)$	$(-4m_0-2)m + 48k_0^2 m_0 + 24k_0^2 + 144k_0 m_0^2 + 142k_0 m_0 + 35k_0 + 96m_0^3 + 144m_0^2 + 66m_0 + 9$
4.4.3	$(2,3,0)$	$(-4m_0-3)m + 48k_0^2 m_0 + 36k_0^2 + 144k_0 m_0^2 + 214k_0 m_0 + 78k_0 + 96m_0^3 + 216m_0^2 + 153m_0 + 34$
4.4.4	$(3,3,0)$	$(-4m_0-4)m + 48k_0^2 m_0 + 48k_0^2 + 144k_0 m_0^2 + 286k_0 m_0 + 142k_0 + 96m_0^3 + 288m_0^2 + 282m_0 + 90$

Table 2: The cases $k \equiv 1 \pmod 4$ in the proof of Theorem 3.1

Case	(n, n_0, k)	$f(m)$
1.1.1	$(0,0,1)$	$m^2 + (-48k_0m_0 - 48m_0^2 - 18m_0 + 2)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 480k_0m_0^2 - 14k_0m_0 + 576m_0^4 + 432m_0^3 + 49m_0^2 - 13m_0 + 1$
1.1.2	$(1,0,1)$	$m^2 + (-48k_0m_0 - 12k_0 - 48m_0^2 - 42m_0 - 5)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 336k_0m_0^2 + 624k_0m_0 + 168k_0 + 576m_0^4 + 1008m_0^3 + 577m_0^2 + 120m_0 + 9$
1.1.3	$(2,0,1)$	$m^2 + (-48k_0m_0 - 24k_0 - 48m_0^2 - 66m_0 - 19)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 576k_0m_0^2 + 1330k_0m_0 + 257k_0 + 576m_0^4 + 1584m_0^3 + 1561m_0^2 + 648m_0 + 96$
1.1.4	$(3,0,1)$	$m^2 + (-48k_0m_0 - 36k_0 - 48m_0^2 - 90m_0 - 38)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 912k_0m_0^2 + 2208k_0m_0 + 737k_0 + 2638k_0m_0 + 576m_0^4 + 2160m_0^3 + 2953m_0^2 + 1741m_0 + 375$
1.2.1	$(0,1,1)$	$m^2 + (-48k_0m_0 - 48m_0^2 - 18m_0 + 2)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 480k_0m_0^2 - 38k_0m_0 + 576m_0^4 + 432m_0^3 + 25m_0^2 - 20m_0 + 1$
1.2.2	$(1,1,1)$	$m^2 + (-48k_0m_0 - 12k_0 - 48m_0^2 - 42m_0 - 6)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 336k_0m_0^2 + 624k_0m_0 + 168k_0 + 576m_0^4 + 1008m_0^3 + 577m_0^2 + 118m_0 + 7$
1.2.3	$(2,1,1)$	$m^2 + (-48k_0m_0 - 24k_0 - 48m_0^2 - 66m_0 - 19)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 576k_0m_0^2 + 1306k_0m_0 + 245k_0 + 576m_0^4 + 1584m_0^3 + 1537m_0^2 + 617m_0 + 87$
1.2.4	$(3,1,1)$	$m^2 + (-48k_0m_0 - 36k_0 - 48m_0^2 - 90m_0 - 39)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 912k_0m_0^2 + 2208k_0m_0 + 736k_0 + 2638k_0m_0 + 576m_0^4 + 2160m_0^3 + 2953m_0^2 + 1739m_0 + 372$
1.3.1	$(0,2,1)$	$m^2 + (-48k_0m_0 - 48m_0^2 - 18m_0 + 3)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 480k_0m_0^2 - 38k_0m_0 + 576m_0^4 + 432m_0^3 + 25m_0^2 - 22m_0 + 2$
1.3.2	$(1,2,1)$	$m^2 + (-48k_0m_0 - 12k_0 - 48m_0^2 - 42m_0 - 4)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 336k_0m_0^2 + 624k_0m_0 + 168k_0 + 576m_0^4 + 1008m_0^3 + 553m_0^2 + 99m_0 + 7$
1.3.3	$(2,2,1)$	$m^2 + (-48k_0m_0 - 24k_0 - 48m_0^2 - 66m_0 - 18)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 576k_0m_0^2 + 1306k_0m_0 + 245k_0 + 576m_0^4 + 1584m_0^3 + 1537m_0^2 + 615m_0 + 88$
1.3.4	$(3,2,1)$	$m^2 + (-48k_0m_0 - 36k_0 - 48m_0^2 - 90m_0 - 37)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 912k_0m_0^2 + 2208k_0m_0 + 719k_0 + 2614k_0m_0 + 576m_0^4 + 2160m_0^3 + 2929m_0^2 + 1696m_0 + 357$
1.4.1	$(0,3,1)$	$m^2 + (-48k_0m_0 - 48m_0^2 - 18m_0 + 3)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 480k_0m_0^2 - 62k_0m_0 + 576m_0^4 + 432m_0^3 + m_0^2 - 29m_0 + 2$
1.4.2	$(1,3,1)$	$m^2 + (-48k_0m_0 - 12k_0 - 48m_0^2 - 42m_0 - 5)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 336k_0m_0^2 + 624k_0m_0 + 168k_0 + 406k_0m_0 + 576m_0^4 + 1008m_0^3 + 553m_0^2 + 97m_0 + 4$
1.4.3	$(2,3,1)$	$m^2 + (-48k_0m_0 - 24k_0 - 48m_0^2 - 66m_0 - 18)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 576k_0m_0^2 + 1282k_0m_0 + 233k_0 + 576m_0^4 + 1584m_0^3 + 1513m_0^2 + 584m_0 + 78$
1.4.4	$(3,3,1)$	$m^2 + (-48k_0m_0 - 36k_0 - 48m_0^2 - 90m_0 - 38)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 912k_0m_0^2 + 2208k_0m_0 + 718k_0 + 2614k_0m_0 + 576m_0^4 + 2160m_0^3 + 2929m_0^2 + 1694m_0 + 353$
2.1.1	$(0,0,1)$	$(4k_0 + 4m_0 + 2)m - 48k_0^2m_0 - 4k_0^2 - 144k_0m_0^2 - 144k_0m_0 - 96m_0^3 - 72m_0^2 - 13m_0 + 1$
2.1.2	$(1,0,1)$	$(4k_0 + 4m_0 + 3)m - 48k_0^2m_0 - 16k_0^2 - 144k_0m_0^2 - 144k_0m_0 - 96m_0^3 - 144m_0^2 - 64m_0 - 7$
2.1.3	$(2,0,1)$	$(4k_0 + 4m_0 + 4)m - 48k_0^2m_0 - 28k_0^2 - 144k_0m_0^2 - 144k_0m_0 - 96m_0^3 - 216m_0^2 - 157m_0 - 36$
2.1.4	$(3,0,1)$	$(4k_0 + 4m_0 + 5)m - 48k_0^2m_0 - 40k_0^2 - 144k_0m_0^2 - 144k_0m_0 - 96m_0^3 - 288m_0^2 - 280m_0 - 87$
2.2.1	$(0,1,1)$	$(4k_0 + 4m_0 + 1)m - 48k_0^2m_0 - 16k_0^2 - 144k_0m_0^2 - 144k_0m_0 + 2k_0 - 96m_0^3 - 72m_0^2 - 9m_0 + 1$
2.2.2	$(1,1,1)$	$(4k_0 + 4m_0 + 2)m - 48k_0^2m_0 - 16k_0^2 - 144k_0m_0^2 - 144k_0m_0 - 96m_0^3 - 144m_0^2 - 66m_0 - 9$
2.2.3	$(2,1,1)$	$(4k_0 + 4m_0 + 3)m - 48k_0^2m_0 - 28k_0^2 - 144k_0m_0^2 - 144k_0m_0 - 96m_0^3 - 216m_0^2 - 153m_0 - 34$
2.2.4	$(3,1,1)$	$(4k_0 + 4m_0 + 4)m - 48k_0^2m_0 - 40k_0^2 - 144k_0m_0^2 - 144k_0m_0 - 96m_0^3 - 288m_0^2 - 282m_0 - 90$
2.3.1	$(0,2,1)$	$(4k_0 + 4m_0 + 2)m - 48k_0^2m_0 - 16k_0^2 - 144k_0m_0^2 - 144k_0m_0 + 2k_0 - 96m_0^3 - 72m_0^2 - 11m_0 + 2$
2.3.2	$(1,2,1)$	$(4k_0 + 4m_0 + 3)m - 48k_0^2m_0 - 16k_0^2 - 144k_0m_0^2 - 144k_0m_0 - 96m_0^3 - 144m_0^2 - 62m_0 - 5$
2.3.3	$(2,2,1)$	$(4k_0 + 4m_0 + 4)m - 48k_0^2m_0 - 28k_0^2 - 144k_0m_0^2 - 144k_0m_0 - 96m_0^3 - 216m_0^2 - 155m_0 - 33$
2.3.4	$(3,2,1)$	$(4k_0 + 4m_0 + 5)m - 48k_0^2m_0 - 40k_0^2 - 144k_0m_0^2 - 144k_0m_0 - 96m_0^3 - 288m_0^2 - 278m_0 - 84$
2.4.1	$(0,3,1)$	$(4k_0 + 4m_0 + 1)m - 48k_0^2m_0 - 16k_0^2 - 144k_0m_0^2 - 144k_0m_0 + 4k_0 - 96m_0^3 - 72m_0^2 - 7m_0 + 1$
2.4.2	$(1,3,1)$	$(4k_0 + 4m_0 + 2)m - 48k_0^2m_0 - 16k_0^2 - 144k_0m_0^2 - 144k_0m_0 - 96m_0^3 - 144m_0^2 - 64m_0 - 8$
2.4.3	$(2,3,1)$	$(4k_0 + 4m_0 + 3)m - 48k_0^2m_0 - 28k_0^2 - 144k_0m_0^2 - 144k_0m_0 - 96m_0^3 - 216m_0^2 - 151m_0 - 32$
2.4.4	$(3,3,1)$	$(4k_0 + 4m_0 + 4)m - 48k_0^2m_0 - 40k_0^2 - 144k_0m_0^2 - 144k_0m_0 - 96m_0^3 - 288m_0^2 - 280m_0 - 88$
3.1.1	$(0,0,1)$	$-m^2 + (48k_0m_0 + 10k_0 + 48m_0^2 + 30m_0 + 3)m - 576k_0^2m_0^2 - 192k_0^2m_0 - 13k_0^2 - 1152k_0m_0^3 - 912k_0m_0^2 - 160k_0m_0 - 3k_0 - 576m_0^4 - 720m_0^3 - 265m_0^2 - 26m_0 + 1$
3.1.2	$(1,0,1)$	$-m^2 + (48k_0m_0 + 22k_0 + 48m_0^2 + 54m_0 + 13)m - 576k_0^2m_0^2 - 192k_0^2m_0 - 13k_0^2 - 1152k_0m_0^3 - 1152k_0m_0^2 - 820k_0m_0 - 112k_0 - 576m_0^4 - 1296m_0^3 - 1009m_0^2 - 314m_0 - 32$
3.1.3	$(2,0,1)$	$-m^2 + (48k_0m_0 + 34k_0 + 48m_0^2 + 78m_0 + 30)m - 576k_0^2m_0^2 - 192k_0^2m_0 - 13k_0^2 - 1152k_0m_0^3 - 1152k_0m_0^2 - 1936k_0m_0 - 455k_0 - 576m_0^4 - 1872m_0^3 - 2209m_0^2 - 1119m_0 - 205$
3.1.4	$(3,0,1)$	$-m^2 + (48k_0m_0 + 46k_0 + 48m_0^2 + 102m_0 + 52)m - 576k_0^2m_0^2 - 192k_0^2m_0 - 13k_0^2 - 1152k_0m_0^3 - 1056k_0m_0^2 - 1110k_0m_0 - 3460k_0m_0 - 576m_0^4 - 2448m_0^3 - 3817m_0^2 - 2583m_0 - 639$
3.2.1	$(0,1,1)$	$-m^2 + (48k_0m_0 + 10k_0 + 48m_0^2 + 30m_0 + 1)m - 576k_0^2m_0^2 - 192k_0^2m_0 - 13k_0^2 - 1152k_0m_0^3 - 912k_0m_0^2 - 136k_0m_0 + 2k_0 - 576m_0^4 - 720m_0^3 - 241m_0^2 - 9m_0 + 1$
3.2.2	$(1,1,1)$	$-m^2 + (48k_0m_0 + 22k_0 + 48m_0^2 + 54m_0 + 12)m - 576k_0^2m_0^2 - 192k_0^2m_0 - 13k_0^2 - 1152k_0m_0^3 - 1152k_0m_0^2 - 820k_0m_0 - 113k_0 - 576m_0^4 - 1296m_0^3 - 1009m_0^2 - 316m_0 - 34$
3.2.3	$(2,1,1)$	$-m^2 + (48k_0m_0 + 34k_0 + 48m_0^2 + 78m_0 + 28)m - 576k_0^2m_0^2 - 192k_0^2m_0 - 13k_0^2 - 1152k_0m_0^3 - 1152k_0m_0^2 - 1776k_0m_0 - 438k_0 - 576m_0^4 - 1872m_0^3 - 2185m_0^2 - 1078m_0 - 190$
3.2.4	$(3,1,1)$	$-m^2 + (48k_0m_0 + 46k_0 + 48m_0^2 + 102m_0 + 51)m - 576k_0^2m_0^2 - 192k_0^2m_0 - 13k_0^2 - 1152k_0m_0^3 - 1152k_0m_0^2 - 2640k_0m_0 - 820k_0 - 576m_0^4 - 2448m_0^3 - 3817m_0^2 - 2585m_0 - 642$
3.3.1	$(0,2,1)$	$-m^2 + (48k_0m_0 + 10k_0 + 48m_0^2 + 30m_0 + 2)m - 576k_0^2m_0^2 - 192k_0^2m_0 - 13k_0^2 - 1152k_0m_0^3 - 912k_0m_0^2 - 136k_0m_0 + 2k_0 - 576m_0^4 - 720m_0^3 - 241m_0^2 - 11m_0 + 2$
3.3.2	$(1,2,1)$	$-m^2 + (48k_0m_0 + 22k_0 + 48m_0^2 + 54m_0 + 12)m - 576k_0^2m_0^2 - 192k_0^2m_0 - 13k_0^2 - 1152k_0m_0^3 - 1152k_0m_0^2 - 796k_0m_0 - 101k_0 - 576m_0^4 - 1296m_0^3 - 985m_0^2 - 287m_0 - 25$
3.3.3	$(2,2,1)$	$-m^2 + (48k_0m_0 + 34k_0 + 48m_0^2 + 78m_0 + 29)m - 576k_0^2m_0^2 - 192k_0^2m_0 - 13k_0^2 - 1152k_0m_0^3 - 1152k_0m_0^2 - 1912k_0m_0 - 438k_0 - 576m_0^4 - 1872m_0^3 - 2185m_0^2 - 1080m_0 - 189$
3.3.4	$(3,2,1)$	$-m^2 + (48k_0m_0 + 46k_0 + 48m_0^2 + 102m_0 + 51)m - 576k_0^2m_0^2 - 192k_0^2m_0 - 13k_0^2 - 1152k_0m_0^3 - 1056k_0m_0^2 - 3436k_0m_0 - 1087k_0 - 576m_0^4 - 2448m_0^3 - 3793m_0^2 - 2532m_0 - 613$
3.4.1	$(0,3,1)$	$-m^2 + (48k_0m_0 + 10k_0 + 48m_0^2 + 30m_0 + 1)m - 576k_0^2m_0^2 - 192k_0^2m_0 - 13k_0^2 - 1152k_0m_0^3 - 912k_0m_0^2 - 112k_0m_0 + 7k_0 - 576m_0^4 - 720m_0^3 - 217m_0^2 + 6m_0 + 1$
3.4.2	$(1,3,1)$	$-m^2 + (48k_0m_0 + 22k_0 + 48m_0^2 + 54m_0 + 11)m - 576k_0^2m_0^2 - 192k_0^2m_0 - 13k_0^2 - 1152k_0m_0^3 - 1152k_0m_0^2 - 796k_0m_0 - 102k_0 - 576m_0^4 - 1296m_0^3 - 985m_0^2 - 289m_0 - 28$
3.4.3	$(2,3,1)$	$-m^2 + (48k_0m_0 + 34k_0 + 48m_0^2 + 78m_0 + 27)m - 576k_0^2m_0^2 - 192k_0^2m_0 - 13k_0^2 - 1152k_0m_0^3 - 1152k_0m_0^2 - 1888k_0m_0 - 421k_0 - 576m_0^4 - 1872m_0^3 - 2161m_0^2 - 1039m_0 - 176$
3.4.4	$(3,3,1)$	$-m^2 + (48k_0m_0 + 46k_0 + 48m_0^2 + 102m_0 + 50)m - 576k_0^2m_0^2 - 192k_0^2m_0 - 13k_0^2 - 1152k_0m_0^3 - 1056k_0m_0^2 - 3436k_0m_0 - 1088k_0 - 576m_0^4 - 2448m_0^3 - 3793m_0^2 - 2534m_0 - 617$
4.1.1	$(0,0,1)$	$-4m_0m + 48k_0^2m_0 + 12k_0^2 + 144k_0m_0^2 + 82k_0m_0 + 12k_0 + 96m_0^3 + 96m_0^2 + 25m_0 + 3$

Table 2 – continued from previous page

Case	(n, n_0, k)	$f(m)$
4.1.2	$(1,0,1)$	$(-4m_0 - 2)m + 48k_0^2m_0 + 24k_0^2 + 144k_0m_0^2 + 178k_0m_0 + 53k_0 + 96m_0^3 + 192m_0^2 + +121m_0 + 24$
4.1.3	$(2,0,1)$	$(-4m_0 - 2)m + 48k_0^2m_0 + 36k_0^2 + 144k_0m_0^2 + 226k_0m_0 + 89k_0 + 96m_0^3 + 240m_0^2 + 193m_0 + 51$
4.1.4	$(3,0,1)$	$(-4m_0 - 4)m + 48k_0^2m_0 + 48k_0^2 + 144k_0m_0^2 + 322k_0m_0 + 178k_0 + 96m_0^3 + 336m_0^2 + 385m_0 + 145$
4.2.1	$(0,1,1)$	$(-4m_0 - 2)m + 48k_0^2m_0 + 12k_0^2 + 144k_0m_0^2 + 106k_0m_0 + 17k_0 + 96m_0^3 + 120m_0^2 + 42m_0 + 3$
4.2.2	$(1,1,1)$	$(-4m_0 - 2)m + 48k_0^2m_0 + 24k_0^2 + 144k_0m_0^2 + 154k_0m_0 + 41k_0 + 96m_0^3 + 168m_0^2 + 90m_0 + 15$
4.2.3	$(2,1,1)$	$(-4m_0 - 4)m + 48k_0^2m_0 + 36k_0^2 + 144k_0m_0^2 + 250k_0m_0 + 106k_0 + 96m_0^3 + 264m_0^2 + 234m_0 + 66$
4.2.4	$(3,1,1)$	$(-4m_0 - 4)m + 48k_0^2m_0 + 48k_0^2 + 144k_0m_0^2 + 298k_0m_0 + 154k_0 + 96m_0^3 + 312m_0^2 + 330m_0 + 114$
4.3.1	$(0,2,1)$	$-4m_0m + 48k_0^2m_0 + 12k_0^2 + 144k_0m_0^2 + 82k_0m_0 + 12k_0 + 96m_0^3 + 96m_0^2 + 23m_0 + 3$
4.3.2	$(1,2,1)$	$(-4m_0 - 2)m + 48k_0^2m_0 + 24k_0^2 + 144k_0m_0^2 + 178k_0m_0 + 53k_0 + 96m_0^3 + 192m_0^2 + 119m_0 + 24$
4.3.3	$(2,2,1)$	$(-4m_0 - 2)m + 48k_0^2m_0 + 36k_0^2 + 144k_0m_0^2 + 226k_0m_0 + 89k_0 + 96m_0^3 + 240m_0^2 + 191m_0 + 51$
4.3.4	$(3,2,1)$	$(-4m_0 - 4)m + 48k_0^2m_0 + 48k_0^2 + 144k_0m_0^2 + 322k_0m_0 + 178k_0 + 96m_0^3 + 336m_0^2 + 383m_0 + 143$
4.4.1	$(0,3,1)$	$(-4m_0 - 2)m + 48k_0^2m_0 + 12k_0^2 + 144k_0m_0^2 + 106k_0m_0 + 17k_0 + 96m_0^3 + 120m_0^2 + 40m_0 + 2$
4.4.2	$(1,3,1)$	$(-4m_0 - 2)m + 48k_0^2m_0 + 24k_0^2 + 144k_0m_0^2 + 154k_0m_0 + 41k_0 + 96m_0^3 + 168m_0^2 + 88m_0 + 14$
4.4.3	$(2,3,1)$	$(-4m_0 - 4)m + 48k_0^2m_0 + 36k_0^2 + 144k_0m_0^2 + 250k_0m_0 + 106k_0 + 96m_0^3 + 264m_0^2 + 232m_0 + 64$
4.4.4	$(3,3,1)$	$(-4m_0 - 4)m + 48k_0^2m_0 + 48k_0^2 + 144k_0m_0^2 + 298k_0m_0 + 154k_0 + 96m_0^3 + 312m_0^2 + 328m_0 + 112$

Table 3: The cases $k \equiv 2 \pmod 4$ in the proof of Theorem 3.1

Case	(n, n_0, k)	$f(m)$
1.1.1	$(0,0,2)$	$m^2 + (-48k_0m_0 - 48m_0^2 - 30m_0 + 2)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 768k_0m_0^2 + 720m_0^3 + 193m_0^2 - 21m_0 + 1$
1.1.2	$(1,0,2)$	$m^2 + (-48k_0m_0 - 48m_0^2 - 12k_0 - 54m_0 - 9)m + 576k_0^2m_0^2 + 576k_0^2m_0 + 1152k_0m_0^3 + 336k_0m_0^2 + 610k_0m_0 + 576m_0^4 + 1296m_0^3 + 70k_0 + 576m_0^4 + 1296m_0^3 + 262m_0 + 25$
1.1.3	$(2,0,2)$	$m^2 + (-48k_0m_0 - 48m_0^2 - 24k_0 - 78m_0 - 25)m + 576k_0^2m_0^2 + 576k_0^2m_0 + 1152k_0m_0^3 + 624k_0m_0^2 + 1632k_0m_0 + 168k_0^2 + 576m_0^4 + 1296m_0^3 + 335k_0 + 927k_0 + 961m_0^2 + 1000m_0 + 165$
1.1.4	$(3,0,2)$	$m^2 + (-48k_0m_0 - 48m_0^2 - 36k_0 - 102m_0 - 48)m + 576k_0^2m_0^2 + 576k_0^2m_0 + 1152k_0m_0^3 + 912k_0m_0^2 + 2496k_0m_0 + 360k_0^2 + 576m_0^4 + 1296m_0^3 + 335k_0 + 3106k_0m_0 + 1872m_0^2 + 2137m_0^2 + 2483m_0 + 594$
1.2.1	$(0,1,2)$	$m^2 + (-48k_0m_0 - 48m_0^2 - 30m_0 + 2)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 768k_0m_0^2 + 720m_0^3 + 193m_0^2 - 19m_0 + 18$
1.2.2	$(1,1,2)$	$m^2 + (-48k_0m_0 - 48m_0^2 - 12k_0 - 54m_0 - 8)m + 576k_0^2m_0^2 + 576k_0^2m_0 + 1152k_0m_0^3 + 336k_0m_0^2 + 586k_0m_0 + 576m_0^4 + 1296m_0^3 + 61k_0 + 576m_0^2 + 937m_0^2 + 233m_0 + 18$
1.2.3	$(2,1,2)$	$m^2 + (-48k_0m_0 - 48m_0^2 - 24k_0 - 78m_0 - 25)m + 576k_0^2m_0^2 + 576k_0^2m_0 + 1152k_0m_0^3 + 624k_0m_0^2 + 1630k_0m_0 + 168k_0^2 + 576m_0^4 + 1296m_0^3 + 335k_0 + 906k_0 + 937m_0^2 + 1002m_0 + 165$
1.2.4	$(3,1,2)$	$m^2 + (-48k_0m_0 - 48m_0^2 - 36k_0 - 102m_0 - 47)m + 576k_0^2m_0^2 + 576k_0^2m_0 + 1152k_0m_0^3 + 912k_0m_0^2 + 2496k_0m_0 + 360k_0^2 + 576m_0^4 + 1296m_0^3 + 335k_0 + 3082k_0m_0 + 1872m_0^2 + 2137m_0^2 + 2430m_0 + 567$
1.3.1	$(0,2,2)$	$m^2 + (-48k_0m_0 - 48m_0^2 - 30m_0 + 3)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 768k_0m_0^2 + 720m_0^3 - 26k_0m_0 + 169m_0^2 - 36m_0 + 2$
1.3.2	$(1,2,2)$	$m^2 + (-48k_0m_0 - 48m_0^2 - 12k_0 - 54m_0 - 8)m + 576k_0^2m_0^2 + 576k_0^2m_0 + 1152k_0m_0^3 + 336k_0m_0^2 + 586k_0m_0 + 576m_0^4 + 1296m_0^3 + 64k_0 + 576m_0^2 + 937m_0^2 + 235m_0 + 20$
1.3.3	$(2,2,2)$	$m^2 + (-48k_0m_0 - 48m_0^2 - 24k_0 - 78m_0 - 24)m + 576k_0^2m_0^2 + 576k_0^2m_0 + 1152k_0m_0^3 + 624k_0m_0^2 + 1606k_0m_0 + 168k_0^2 + 576m_0^4 + 1296m_0^3 + 323k_0 + 1606k_0m_0 + 2113m_0^2 + 961m_0 + 152$
1.3.4	$(3,2,2)$	$m^2 + (-48k_0m_0 - 48m_0^2 - 36k_0 - 102m_0 - 47)m + 576k_0^2m_0^2 + 576k_0^2m_0 + 1152k_0m_0^3 + 912k_0m_0^2 + 2496k_0m_0 + 360k_0^2 + 576m_0^4 + 1296m_0^3 + 323k_0 + 3082k_0m_0 + 909k_0m_0 + 576m_0^4 + 3745m_0^2 + 2432m_0 + 570$
1.4.1	$(0,3,2)$	$m^2 + (-48k_0m_0 - 48m_0^2 - 30m_0 + 3)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 768k_0m_0^2 + 720m_0^3 - 26k_0m_0 + 169m_0^2 - 34m_0 + 2$
1.4.2	$(1,3,2)$	$m^2 + (-48k_0m_0 - 48m_0^2 - 12k_0 - 54m_0 - 7)m + 576k_0^2m_0^2 + 576k_0^2m_0 + 1152k_0m_0^3 + 336k_0m_0^2 + 562k_0m_0 + 576m_0^4 + 1296m_0^3 + 55k_0 + 576m_0^2 + 913m_0^2 + 206m_0 + 15$
1.4.3	$(2,3,2)$	$m^2 + (-48k_0m_0 - 48m_0^2 - 24k_0 - 78m_0 - 24)m + 576k_0^2m_0^2 + 576k_0^2m_0 + 1152k_0m_0^3 + 624k_0m_0^2 + 1606k_0m_0 + 168k_0^2 + 576m_0^4 + 1296m_0^3 + 323k_0 + 1606k_0m_0 + 2113m_0^2 + 963m_0 + 154$
1.4.4	$(3,3,2)$	$m^2 + (-48k_0m_0 - 48m_0^2 - 36k_0 - 102m_0 - 46)m + 576k_0^2m_0^2 + 576k_0^2m_0 + 1152k_0m_0^3 + 912k_0m_0^2 + 2496k_0m_0 + 360k_0^2 + 576m_0^4 + 1296m_0^3 + 323k_0 + 3058k_0m_0 + 888k_0 + 576m_0^4 + 2448m_0^2 + 3721m_0^2 + 2379m_0 + 544$
2.1.1	$(0,0,2)$	$(4k_0 + 4m_0 + 3)m - 48k_0^2m_0 - 4k_0^2 - 48k_0m_0^2 - 94k_0m_0 - 2k_0 - 96m_0^2 - 120m_0^2 - 38m_0 + 1$
2.1.2	$(1,0,2)$	$(4k_0 + 4m_0 + 3)m - 48k_0^2m_0 - 16k_0^2 - 48k_0m_0^2 - 144k_0m_0 - 26k_0 - 96m_0^3 - 168m_0^2 - 86m_0 - 11$
2.1.3	$(2,0,2)$	$(4k_0 + 4m_0 + 5)m - 48k_0^2m_0 - 28k_0^2 - 48k_0m_0^2 - 144k_0m_0 - 85k_0 - 96m_0^3 - 230m_0 - 60$
2.1.4	$(3,0,2)$	$(4k_0 + 4m_0 + 5)m - 48k_0^2m_0 - 40k_0^2 - 48k_0m_0^2 - 144k_0m_0 - 133k_0 - 96m_0^3 - 312m_0 - 326m_0 - 108$
2.2.1	$(0,1,2)$	$(4k_0 + 4m_0 + 2)m - 48k_0^2m_0 - 4k_0^2 - 48k_0m_0^2 - 70k_0m_0 - 96m_0^3 - 96m_0^2 - 19m_0 + 1$
2.2.2	$(1,1,2)$	$(4k_0 + 4m_0 + 4)m - 48k_0^2m_0 - 16k_0^2 - 48k_0m_0^2 - 166k_0m_0 - 35k_0 - 96m_0^3 - 192m_0 - 115m_0 - 18$
2.2.3	$(2,1,2)$	$(4k_0 + 4m_0 + 4)m - 48k_0^2m_0 - 28k_0^2 - 48k_0m_0^2 - 214k_0m_0 - 71k_0 - 96m_0^3 - 240m_0 - 187m_0 - 45$
2.2.4	$(3,1,2)$	$(4k_0 + 4m_0 + 6)m - 48k_0^2m_0 - 40k_0^2 - 48k_0m_0^2 - 310k_0m_0 - 154k_0 - 96m_0^3 - 336m_0 - 379m_0 - 135$
2.3.1	$(0,2,2)$	$(4k_0 + 4m_0 + 3)m - 48k_0^2m_0 - 4k_0^2 - 48k_0m_0^2 - 94k_0m_0 - 2k_0 - 96m_0^3 - 120m_0^2 - 36m_0 + 2$
2.3.2	$(1,2,2)$	$(4k_0 + 4m_0 + 3)m - 48k_0^2m_0 - 16k_0^2 - 48k_0m_0^2 - 142k_0m_0 - 24k_0 - 96m_0^3 - 168m_0 - 84m_0 - 10$
2.3.3	$(2,2,2)$	$(4k_0 + 4m_0 + 5)m - 48k_0^2m_0 - 28k_0^2 - 48k_0m_0^2 - 238k_0m_0 - 83k_0 - 96m_0^3 - 264m_0 - 228m_0 - 58$
2.3.4	$(3,2,2)$	$(4k_0 + 4m_0 + 5)m - 48k_0^2m_0 - 40k_0^2 - 48k_0m_0^2 - 286k_0m_0 - 131k_0 - 96m_0^3 - 312m_0 - 324m_0 - 106$
2.4.1	$(0,3,2)$	$(4k_0 + 4m_0 + 2)m - 48k_0^2m_0 - 4k_0^2 - 48k_0m_0^2 - 70k_0m_0 - 96m_0^3 - 96m_0^2 - 17m_0 + 2$
2.4.2	$(1,3,2)$	$(4k_0 + 4m_0 + 4)m - 48k_0^2m_0 - 16k_0^2 - 48k_0m_0^2 - 166k_0m_0 - 33k_0 - 96m_0^3 - 192m_0 - 113m_0 - 15$
2.4.3	$(2,3,2)$	$(4k_0 + 4m_0 + 4)m - 48k_0^2m_0 - 28k_0^2 - 48k_0m_0^2 - 214k_0m_0 - 69k_0 - 96m_0^3 - 240m_0 - 185m_0 - 42$
2.4.4	$(3,3,2)$	$(4k_0 + 4m_0 + 6)m - 48k_0^2m_0 - 40k_0^2 - 48k_0m_0^2 - 310k_0m_0 - 152k_0 - 96m_0^3 - 336m_0 - 377m_0 - 132$
3.1.1	$(0,0,2)$	$-m^2 + (48k_0m_0 + 10k_0 + 42m_0 + 5)m - 192k_0^2m_0^2 - 13k_0^2 - 1152k_0m_0^3 - 1200k_0m_0^2 - 256k_0m_0 - 8k_0 - 576m_0^4 - 1008m_0^3 - 529m_0^2 - 76m_0$
3.1.2	$(1,0,2)$	$-m^2 + (48k_0m_0 + 22k_0 + 66m_0 + 18)m - 576k_0^2m_0^2 - 480k_0^2m_0 - 1152k_0m_0^3 - 2064k_0m_0^2 - 1060k_0m_0 - 161k_0 - 576m_0^4 - 1584m_0^3 - 1489m_0^2 - 551m_0 - 67$
3.1.3	$(2,0,2)$	$-m^2 + (48k_0m_0 + 34k_0 + 90m_0 + 38)m - 576k_0^2m_0^2 - 768k_0^2m_0 - 1152k_0m_0^3 - 2928k_0m_0^2 - 2320k_0m_0 - 580k_0 - 576m_0^4 - 2160m_0^3 - 2905m_0^2 - 1649m_0 - 332$
3.1.4	$(3,0,2)$	$-m^2 + (48k_0m_0 + 46k_0 + 114m_0 + 63)m - 576k_0^2m_0^2 - 1056k_0^2m_0 - 1152k_0m_0^3 - 3792k_0m_0^2 - 3988k_0m_0 - 1351k_0 - 576m_0^4 - 2736m_0^3 - 4729m_0^2 - 3516m_0 - 949$
3.2.1	$(0,1,2)$	$-m^2 + (48k_0m_0 + 10k_0 + 42m_0 + 4)m - 192k_0^2m_0^2 - 13k_0^2 - 1152k_0m_0^3 - 1200k_0m_0^2 - 232k_0m_0 - 6k_0 - 576m_0^4 - 1008m_0^3 - 505m_0^2 - 57m_0$
3.2.2	$(1,1,2)$	$-m^2 + (48k_0m_0 + 22k_0 + 66m_0 + 18)m - 576k_0^2m_0^2 - 480k_0^2m_0 - 1152k_0m_0^3 - 2064k_0m_0^2 - 1060k_0m_0 - 161k_0 - 576m_0^4 - 1584m_0^3 - 1489m_0^2 - 549m_0 - 67$
3.2.3	$(2,1,2)$	$-m^2 + (48k_0m_0 + 34k_0 + 90m_0 + 37)m - 576k_0^2m_0^2 - 768k_0^2m_0 - 1152k_0m_0^3 - 2928k_0m_0^2 - 2296k_0m_0 - 566k_0 - 576m_0^4 - 2160m_0^3 - 2881m_0^2 - 1606m_0 - 317$
3.2.4	$(3,1,2)$	$-m^2 + (48k_0m_0 + 46k_0 + 114m_0 + 63)m - 576k_0^2m_0^2 - 1056k_0^2m_0 - 1152k_0m_0^3 - 3792k_0m_0^2 - 3988k_0m_0 - 1351k_0 - 576m_0^4 - 2736m_0^3 - 4729m_0^2 - 3514m_0 - 947$
3.3.1	$(0,2,2)$	$-m^2 + (48k_0m_0 + 10k_0 + 42m_0 + 4)m - 192k_0^2m_0^2 - 13k_0^2 - 1152k_0m_0^3 - 1200k_0m_0^2 - 232k_0m_0 - 3k_0 - 576m_0^4 - 1008m_0^3 - 505m_0^2 - 55m_0 + 2$
3.3.2	$(1,2,2)$	$-m^2 + (48k_0m_0 + 22k_0 + 66m_0 + 17)m - 576k_0^2m_0^2 - 480k_0^2m_0 - 1152k_0m_0^3 - 2064k_0m_0^2 - 1036k_0m_0 - 150k_0 - 576m_0^4 - 1584m_0^3 - 1465m_0^2 - 518m_0 - 59$
3.3.3	$(2,2,2)$	$-m^2 + (48k_0m_0 + 34k_0 + 90m_0 + 37)m - 576k_0^2m_0^2 - 768k_0^2m_0 - 1152k_0m_0^3 - 2928k_0m_0^2 - 2296k_0m_0 - 563k_0 - 576m_0^4 - 2160m_0^3 - 2881m_0^2 - 1604m_0 - 314$
3.3.4	$(3,2,2)$	$-m^2 + (48k_0m_0 + 46k_0 + 114m_0 + 62)m - 576k_0^2m_0^2 - 1056k_0^2m_0 - 1152k_0m_0^3 - 3792k_0m_0^2 - 3964k_0m_0 - 1328k_0 - 576m_0^4 - 2736m_0^3 - 4705m_0^2 - 3459m_0 - 918$
3.4.1	$(0,3,2)$	$-m^2 + (48k_0m_0 + 10k_0 + 42m_0 + 3)m - 192k_0^2m_0^2 - 13k_0^2 - 1152k_0m_0^3 - 1200k_0m_0^2 - 208k_0m_0 - k_0 - 576m_0^4 - 1008m_0^3 - 481m_0^2 - 36m_0 + 2$
3.4.2	$(1,3,2)$	$-m^2 + (48k_0m_0 + 22k_0 + 66m_0 + 17)m - 576k_0^2m_0^2 - 480k_0^2m_0 - 1152k_0m_0^3 - 2064k_0m_0^2 - 1036k_0m_0 - 150k_0 - 576m_0^4 - 1584m_0^3 - 1465m_0^2 - 516m_0 - 57$
3.4.3	$(2,3,2)$	$-m^2 + (48k_0m_0 + 34k_0 + 90m_0 + 36)m - 576k_0^2m_0^2 - 768k_0^2m_0 - 1152k_0m_0^3 - 2928k_0m_0^2 - 2272k_0m_0 - 549k_0 - 576m_0^4 - 2160m_0^3 - 2857m_0^2 - 1561m_0 - 298$
3.4.4	$(3,3,2)$	$-m^2 + (48k_0m_0 + 46k_0 + 114m_0 + 62)m - 576k_0^2m_0^2 - 1056k_0^2m_0 - 1152k_0m_0^3 - 3792k_0m_0^2 - 3964k_0m_0 - 1328k_0 - 576m_0^4 - 2736m_0^3 - 4705m_0^2 - 3457m_0 - 916$
4.1.1	$(0,0,2)$	$(-4m_0 - 1)m + 48k_0^2m_0 + 12k_0^2 + 144k_0m_0^2 + 1118k_0m_0 + 22k_0 + 96m_0^3 + 144m_0^2 + 62m_0 + 9$

Continued on next page

Table 3 – continued from previous page

Case	(n, n_0, k)	$f(m)$
4.1.2	$(1,0,2)$	$(-4m_0 - 2)m + 48k_0^2 m_0 + 24k_0^2 + 144k_0 m_0^2 + 190k_0 m_0 + 59k_0 + 96m_0^3 + 216m_0^2 + 149m_0 + 33$
4.1.3	$(2,0,2)$	$(-4m_0 - 3)m + 48k_0^2 m_0 + 36k_0^2 + 144k_0 m_0^2 + 262k_0 m_0 + 117k_0 + 96m_0^3 + 288m_0^2 + 278m_0 + 88$
4.1.4	$(3,0,2)$	$(-4m_0 - 4)m + 48k_0^2 m_0 + 48k_0^2 + 144k_0 m_0^2 + 334k_0 m_0 + 190k_0 + 96m_0^3 + 360m_0^2 + 437m_0 + 173$
4.2.1	$(0,1,2)$	$(-4m_0 - 1)m + 48k_0^2 m_0 + 12k_0^2 + 144k_0 m_0^2 + 118k_0 m_0 + 19k_0 + 96m_0^3 + 144m_0^2 + 58m_0 + 6$
4.2.2	$(1,1,2)$	$(-4m_0 - 2)m + 48k_0^2 m_0 + 24k_0^2 + 144k_0 m_0^2 + 190k_0 m_0 + 59k_0 + 96m_0^3 + 216m_0^2 + 151m_0 + 33$
4.2.3	$(2,1,2)$	$(-4m_0 - 3)m + 48k_0^2 m_0 + 36k_0^2 + 144k_0 m_0^2 + 262k_0 m_0 + 114k_0 + 96m_0^3 + 288m_0^2 + 274m_0 + 83$
4.2.4	$(3,1,2)$	$(-4m_0 - 4)m + 48k_0^2 m_0 + 48k_0^2 + 144k_0 m_0^2 + 334k_0 m_0 + 190k_0 + 96m_0^3 + 360m_0^2 + 439m_0 + 175$
4.3.1	$(0,2,2)$	$(-4m_0 - 1)m + 48k_0^2 m_0 + 12k_0^2 + 144k_0 m_0^2 + 118k_0 m_0 + 22k_0 + 96m_0^3 + 144m_0^2 + 60m_0 + 8$
4.3.2	$(1,2,2)$	$(-4m_0 - 2)m + 48k_0^2 m_0 + 24k_0^2 + 144k_0 m_0^2 + 190k_0 m_0 + 59k_0 + 96m_0^3 + 216m_0^2 + 147m_0 + 31$
4.3.3	$(2,2,2)$	$(-4m_0 - 3)m + 48k_0^2 m_0 + 36k_0^2 + 144k_0 m_0^2 + 262k_0 m_0 + 117k_0 + 96m_0^3 + 288m_0^2 + 276m_0 + 86$
4.3.4	$(3,2,2)$	$(-4m_0 - 4)m + 48k_0^2 m_0 + 48k_0^2 + 144k_0 m_0^2 + 334k_0 m_0 + 190k_0 + 96m_0^3 + 360m_0^2 + 435m_0 + 171$
4.4.1	$(0,3,2)$	$(-4m_0 - 1)m + 48k_0^2 m_0 + 12k_0^2 + 144k_0 m_0^2 + 118k_0 m_0 + 19k_0 + 96m_0^3 + 144m_0^2 + 56m_0 + 6$
4.4.2	$(1,3,2)$	$(-4m_0 - 2)m + 48k_0^2 m_0 + 24k_0^2 + 144k_0 m_0^2 + 190k_0 m_0 + 59k_0 + 96m_0^3 + 216m_0^2 + 149m_0 + 33$
4.4.3	$(2,3,2)$	$(-4m_0 - 3)m + 48k_0^2 m_0 + 36k_0^2 + 144k_0 m_0^2 + 262k_0 m_0 + 114k_0 + 96m_0^3 + 288m_0^2 + 272m_0 + 82$
4.4.4	$(3,3,2)$	$(-4m_0 - 4)m + 48k_0^2 m_0 + 48k_0^2 + 144k_0 m_0^2 + 334k_0 m_0 + 190k_0 + 96m_0^3 + 360m_0^2 + 437m_0 + 173$

Table 4: The cases $k \equiv 3 \pmod 4$ in the proof of Theorem 3.1

Case	(n, n_0, k)	$f(m)$
1.1.1	(0, 0, 3)	$m^2 + (-48k_0m_0 - 48m_0^2 - 42m_0 + 2)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1056k_0m_0^3 + 34k_0m_0 + 1152k_0m_0^2 + 1008m_0^3 + 433m_0^2 - 8m_0 + 1$
1.1.2	(1, 0, 3)	$m^2 + (-48k_0m_0 - 48m_0^2 - 12k_0 - 66m_0 - 11)m + 576k_0^2m_0^2 + 336k_0^2m_0 + 48k_0^2 + 1152k_0m_0^3 + 766k_0m_0^2 + 90k_0m_0 + 576m_0^4 + 1584m_0^3 + 1393m_0^2 + 419m_0 + 42$
1.1.3	(2, 0, 3)	$m^2 + (-48k_0m_0 - 48m_0^2 - 24k_0 - 90m_0 - 31)m + 576k_0^2m_0^2 + 624k_0^2m_0 + 168k_0^2 + 1152k_0m_0^3 + 1954k_0m_0^2 + 425k_0m_0 + 576m_0^4 + 2160m_0^3 + 2809m_0^2 + 1469m_0 + 267$
1.1.4	(3, 0, 3)	$m^2 + (-48k_0m_0 - 48m_0^2 - 36k_0 - 114m_0 - 56)m + 576k_0^2m_0^2 + 912k_0^2m_0 + 360k_0^2 + 1152k_0m_0^3 + 3550k_0m_0^2 + 1097k_0m_0 + 576m_0^4 + 2736m_0^4 + 4633m_0^2 + 3288m_0 + 834$
1.2.1	(0, 1, 3)	$m^2 + (-48k_0m_0 - 48m_0^2 - 42m_0 + 2)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 336k_0m_0^2 + 10k_0m_0 + 1008m_0^3 + 409m_0^2 - 27m_0 + 1$
1.2.2	(1, 1, 3)	$m^2 + (-48k_0m_0 - 48m_0^2 - 12k_0 - 66m_0 - 12)m + 576k_0^2m_0^2 + 336k_0^2m_0 + 48k_0^2 + 1152k_0m_0^3 + 766k_0m_0^2 + 89k_0m_0 + 576m_0^4 + 1584m_0^3 + 1393m_0^2 + 417m_0 + 40$
1.2.3	(2, 1, 3)	$m^2 + (-48k_0m_0 - 48m_0^2 - 24k_0 - 90m_0 - 31)m + 576k_0^2m_0^2 + 624k_0^2m_0 + 168k_0^2 + 1152k_0m_0^3 + 1930k_0m_0^2 + 413k_0m_0 + 576m_0^4 + 2160m_0^3 + 2785m_0^2 + 1426m_0 + 252$
1.2.4	(3, 1, 3)	$m^2 + (-48k_0m_0 - 48m_0^2 - 36k_0 - 114m_0 - 57)m + 576k_0^2m_0^2 + 912k_0^2m_0 + 360k_0^2 + 1152k_0m_0^3 + 3550k_0m_0^2 + 1096k_0m_0 + 576m_0^4 + 2736m_0^4 + 4633m_0^2 + 3286m_0 + 830$
1.3.1	(0, 2, 3)	$m^2 + (-48k_0m_0 - 48m_0^2 - 42m_0 + 3)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 336k_0m_0^2 + 10k_0m_0 + 1008m_0^3 + 409m_0^2 - 29m_0 + 2$
1.3.2	(1, 2, 3)	$m^2 + (-48k_0m_0 - 48m_0^2 - 12k_0 - 66m_0 - 10)m + 576k_0^2m_0^2 + 336k_0^2m_0 + 48k_0^2 + 1152k_0m_0^3 + 742k_0m_0^2 + 84k_0m_0 + 576m_0^4 + 1584m_0^3 + 1369m_0^2 + 386m_0 + 37$
1.3.3	(2, 2, 3)	$m^2 + (-48k_0m_0 - 48m_0^2 - 24k_0 - 90m_0 - 30)m + 576k_0^2m_0^2 + 624k_0^2m_0 + 168k_0^2 + 1152k_0m_0^3 + 1930k_0m_0^2 + 413k_0m_0 + 576m_0^4 + 2160m_0^3 + 2785m_0^2 + 1424m_0 + 252$
1.3.4	(3, 2, 3)	$m^2 + (-48k_0m_0 - 48m_0^2 - 36k_0 - 114m_0 - 55)m + 576k_0^2m_0^2 + 912k_0^2m_0 + 360k_0^2 + 1152k_0m_0^3 + 3526k_0m_0^2 + 1079k_0m_0 + 576m_0^4 + 2736m_0^4 + 4609m_0^2 + 3231m_0 + 806$
1.4.1	(0, 3, 3)	$m^2 + (-48k_0m_0 - 48m_0^2 - 42m_0 + 3)m + 576k_0^2m_0^2 + 48k_0^2m_0 + 1152k_0m_0^3 + 336k_0m_0^2 + 10k_0m_0 + 1008m_0^3 + 385m_0^2 - 48m_0 + 2$
1.4.2	(1, 3, 3)	$m^2 + (-48k_0m_0 - 48m_0^2 - 12k_0 - 66m_0 - 11)m + 576k_0^2m_0^2 + 336k_0^2m_0 + 48k_0^2 + 1152k_0m_0^3 + 742k_0m_0^2 + 83k_0m_0 + 576m_0^4 + 1584m_0^3 + 1369m_0^2 + 384m_0 + 33$
1.4.3	(2, 3, 3)	$m^2 + (-48k_0m_0 - 48m_0^2 - 24k_0 - 90m_0 - 30)m + 576k_0^2m_0^2 + 624k_0^2m_0 + 168k_0^2 + 1152k_0m_0^3 + 1906k_0m_0^2 + 401k_0m_0 + 576m_0^4 + 2160m_0^3 + 2761m_0^2 + 1381m_0 + 236$
1.4.4	(3, 3, 3)	$m^2 + (-48k_0m_0 - 48m_0^2 - 36k_0 - 114m_0 - 56)m + 576k_0^2m_0^2 + 912k_0^2m_0 + 360k_0^2 + 1152k_0m_0^3 + 3526k_0m_0^2 + 1078k_0m_0 + 576m_0^4 + 2736m_0^4 + 4609m_0^2 + 3229m_0 + 802$
2.1.1	(0, 0, 3)	$(4k_0 + 4m_0 + 4)m^2 - 48k_0^2m_0 - 16k_0^2 - 144k_0m_0^2 - 106k_0m_0 - 4k_0 - 96m_0^3 - 144m_0^2 - 54m_0$
2.1.2	(1, 0, 3)	$(4k_0 + 4m_0 + 5)m^2 - 48k_0^2m_0 - 16k_0^2 - 144k_0m_0^2 - 178k_0m_0 - 38k_0 - 96m_0^3 - 216m_0^2 - 141m_0 - 22$
2.1.3	(2, 0, 3)	$(4k_0 + 4m_0 + 6)m^2 - 48k_0^2m_0 - 28k_0^2 - 144k_0m_0^2 - 250k_0m_0 - 93k_0 - 96m_0^3 - 288m_0^2 - 270m_0 - 75$
2.1.4	(3, 0, 3)	$(4k_0 + 4m_0 + 7)m^2 - 48k_0^2m_0 - 40k_0^2 - 144k_0m_0^2 - 322k_0m_0 - 163k_0 - 96m_0^3 - 360m_0^2 - 429m_0 - 158$
2.2.1	(0, 1, 3)	$(4k_0 + 4m_0 + 3)m^2 - 48k_0^2m_0 - 4k_0^2 - 144k_0m_0^2 - 106k_0m_0 - 2k_0 - 96m_0^3 - 144m_0^2 - 50m_0 + 1$
2.2.2	(1, 1, 3)	$(4k_0 + 4m_0 + 4)m^2 - 48k_0^2m_0 - 16k_0^2 - 144k_0m_0^2 - 178k_0m_0 - 39k_0 - 96m_0^3 - 216m_0^2 - 143m_0 - 24$
2.2.3	(2, 1, 3)	$(4k_0 + 4m_0 + 5)m^2 - 48k_0^2m_0 - 28k_0^2 - 144k_0m_0^2 - 250k_0m_0 - 91k_0 - 96m_0^3 - 288m_0^2 - 266m_0 - 72$
2.2.4	(3, 1, 3)	$(4k_0 + 4m_0 + 6)m^2 - 48k_0^2m_0 - 40k_0^2 - 144k_0m_0^2 - 322k_0m_0 - 164k_0 - 96m_0^3 - 360m_0^2 - 431m_0 - 162$
2.3.1	(0, 2, 3)	$(4k_0 + 4m_0 + 4)m^2 - 48k_0^2m_0 - 4k_0^2 - 144k_0m_0^2 - 106k_0m_0 - 2k_0 - 96m_0^3 - 144m_0^2 - 52m_0 + 2$
2.3.2	(1, 2, 3)	$(4k_0 + 4m_0 + 5)m^2 - 48k_0^2m_0 - 16k_0^2 - 144k_0m_0^2 - 178k_0m_0 - 36k_0 - 96m_0^3 - 216m_0^2 - 139m_0 - 19$
2.3.3	(2, 2, 3)	$(4k_0 + 4m_0 + 6)m^2 - 48k_0^2m_0 - 28k_0^2 - 144k_0m_0^2 - 250k_0m_0 - 91k_0 - 96m_0^3 - 288m_0^2 - 268m_0 - 72$
2.3.4	(3, 2, 3)	$(4k_0 + 4m_0 + 7)m^2 - 48k_0^2m_0 - 40k_0^2 - 144k_0m_0^2 - 322k_0m_0 - 161k_0 - 96m_0^3 - 360m_0^2 - 427m_0 - 155$
2.4.1	(0, 3, 3)	$(4k_0 + 4m_0 + 4)m^2 - 48k_0^2m_0 - 4k_0^2 - 144k_0m_0^2 - 106k_0m_0 - 48k_0 + 2 - 96m_0^3 - 144m_0^2 - 48m_0 + 2$
2.4.2	(1, 3, 3)	$(4k_0 + 4m_0 + 4)m^2 - 48k_0^2m_0 - 16k_0^2 - 144k_0m_0^2 - 178k_0m_0 - 37k_0 - 96m_0^3 - 216m_0^2 - 141m_0 - 23$
2.4.3	(2, 3, 3)	$(4k_0 + 4m_0 + 5)m^2 - 48k_0^2m_0 - 28k_0^2 - 144k_0m_0^2 - 250k_0m_0 - 89k_0 - 96m_0^3 - 288m_0^2 - 264m_0 - 70$
2.4.4	(3, 3, 3)	$(4k_0 + 4m_0 + 6)m^2 - 48k_0^2m_0 - 40k_0^2 - 144k_0m_0^2 - 322k_0m_0 - 162k_0 - 96m_0^3 - 360m_0^2 - 429m_0 - 159$
3.1.1	(0, 0, 3)	$-m^2 + (48k_0m_0 + 48m_0^2 + 10k_0 + 54m_0 + 8)m - 576k_0^2m_0^2 - 192k_0^2m_0 - 13k_0^2 - 1152k_0m_0^3 - 1488k_0m_0^2 - 352k_0m_0 - 16k_0 - 576m_0^4 - 1296m_0^3 - 865m_0^2 - 154m_0 - 4$
3.1.2	(1, 0, 3)	$-m^2 + (48k_0m_0 + 48m_0^2 + 22k_0 + 78m_0 + 24)m - 576k_0^2m_0^2 - 480k_0^2m_0 - 97k_0^2 - 1152k_0m_0^3 - 2352k_0m_0^2 - 1300k_0m_0 - 209k_0 - 576m_0^4 - 1872m_0^3 - 2041m_0^2 - 844m_0 - 112$
3.1.3	(2, 0, 3)	$-m^2 + (48k_0m_0 + 48m_0^2 + 34k_0 + 102m_0 + 47)m - 576k_0^2m_0^2 - 768k_0^2m_0 - 253k_0^2 - 1152k_0m_0^3 - 3216k_0m_0^2 - 2704k_0m_0 - 708k_0 - 576m_0^4 - 2448m_0^3 - 3673m_0^2 - 2279m_0 - 495$
3.1.4	(3, 0, 3)	$-m^2 + (48k_0m_0 + 48m_0^2 + 46k_0 + 126m_0 + 75)m - 576k_0^2m_0^2 - 1056k_0^2m_0 - 481k_0^2 - 1152k_0m_0^3 - 4080k_0m_0^2 - 4516k_0m_0 - 1591k_0 - 576m_0^4 - 3024m_0^3 - 5713m_0^2 - 4577m_0 - 1314$
3.2.1	(0, 1, 3)	$-m^2 + (48k_0m_0 + 48m_0^2 + 10k_0 + 54m_0 + 6)m - 576k_0^2m_0^2 - 192k_0^2m_0 - 13k_0^2 - 1152k_0m_0^3 - 1488k_0m_0^2 - 328k_0m_0 - 11k_0 - 576m_0^4 - 1296m_0^3 - 841m_0^2 - 125m_0 - 1$
3.2.2	(1, 1, 3)	$-m^2 + (48k_0m_0 + 48m_0^2 + 22k_0 + 78m_0 + 23)m - 576k_0^2m_0^2 - 480k_0^2m_0 - 97k_0^2 - 1152k_0m_0^3 - 2352k_0m_0^2 - 1300k_0m_0 - 210k_0 - 576m_0^4 - 1872m_0^3 - 2041m_0^2 - 846m_0 - 114$
3.2.3	(2, 1, 3)	$-m^2 + (48k_0m_0 + 48m_0^2 + 34k_0 + 102m_0 + 45)m - 576k_0^2m_0^2 - 768k_0^2m_0 - 253k_0^2 - 1152k_0m_0^3 - 3216k_0m_0^2 - 2680k_0m_0 - 691k_0 - 576m_0^4 - 2448m_0^3 - 3649m_0^2 - 2226m_0 - 472$
3.2.4	(3, 1, 3)	$-m^2 + (48k_0m_0 + 48m_0^2 + 46k_0 + 126m_0 + 74)m - 576k_0^2m_0^2 - 1056k_0^2m_0 - 481k_0^2 - 1152k_0m_0^3 - 4080k_0m_0^2 - 4516k_0m_0 - 1592k_0 - 576m_0^4 - 3024m_0^3 - 5713m_0^2 - 4579m_0 - 1318$
3.3.1	(0, 2, 3)	$-m^2 + (48k_0m_0 + 48m_0^2 + 10k_0 + 54m_0 + 7)m - 576k_0^2m_0^2 - 192k_0^2m_0 - 13k_0^2 - 1152k_0m_0^3 - 1488k_0m_0^2 - 328k_0m_0 - 11k_0 - 576m_0^4 - 1296m_0^3 - 841m_0^2 - 127m_0$
3.3.2	(1, 2, 3)	$-m^2 + (48k_0m_0 + 48m_0^2 + 22k_0 + 78m_0 + 23)m - 576k_0^2m_0^2 - 480k_0^2m_0 - 97k_0^2 - 1152k_0m_0^3 - 2352k_0m_0^2 - 1276k_0m_0 - 198k_0 - 576m_0^4 - 1872m_0^3 - 2017m_0^2 - 805m_0 - 100$
3.3.3	(2, 2, 3)	$-m^2 + (48k_0m_0 + 48m_0^2 + 34k_0 + 102m_0 + 46)m - 576k_0^2m_0^2 - 768k_0^2m_0 - 253k_0^2 - 1152k_0m_0^3 - 3216k_0m_0^2 - 2680k_0m_0 - 691k_0 - 576m_0^4 - 2448m_0^3 - 3649m_0^2 - 2228m_0 - 472$
3.3.4	(3, 2, 3)	$-m^2 + (48k_0m_0 + 48m_0^2 + 46k_0 + 126m_0 + 74)m - 576k_0^2m_0^2 - 1056k_0^2m_0 - 481k_0^2 - 1152k_0m_0^3 - 4080k_0m_0^2 - 4492k_0m_0 - 1568k_0 - 576m_0^4 - 3024m_0^3 - 5689m_0^2 - 4514m_0 - 1277$
3.4.1	(0, 3, 3)	$-m^2 + (48k_0m_0 + 48m_0^2 + 10k_0 + 54m_0 + 5)m - 576k_0^2m_0^2 - 192k_0^2m_0 - 13k_0^2 - 1152k_0m_0^3 - 1488k_0m_0^2 - 304k_0m_0 - 6k_0 - 576m_0^4 - 1296m_0^3 - 817m_0^2 - 98m_0 + 1$
3.4.2	(1, 3, 3)	$-m^2 + (48k_0m_0 + 48m_0^2 + 22k_0 + 78m_0 + 22)m - 576k_0^2m_0^2 - 480k_0^2m_0 - 97k_0^2 - 1152k_0m_0^3 - 2352k_0m_0^2 - 1276k_0m_0 - 199k_0 - 576m_0^4 - 1872m_0^3 - 2017m_0^2 - 807m_0 - 104$
3.4.3	(2, 3, 3)	$-m^2 + (48k_0m_0 + 48m_0^2 + 34k_0 + 102m_0 + 44)m - 576k_0^2m_0^2 - 768k_0^2m_0 - 253k_0^2 - 1152k_0m_0^3 - 3216k_0m_0^2 - 2656k_0m_0 - 674k_0 - 576m_0^4 - 2448m_0^3 - 3625m_0^2 - 2175m_0 - 450$
3.4.4	(3, 3, 3)	$-m^2 + (48k_0m_0 + 48m_0^2 + 46k_0 + 126m_0 + 73)m - 576k_0^2m_0^2 - 1056k_0^2m_0 - 481k_0^2 - 1152k_0m_0^3 - 4080k_0m_0^2 - 4492k_0m_0 - 1569k_0 - 576m_0^4 - 3024m_0^3 - 5689m_0^2 - 4516m_0 - 1281$
4.1.1	(0, 0, 3)	$-4m_0m + 48k_0^2m_0 + 12k_0^2 + 144k_0m_0^2 + 130k_0m_0 + 24k_0 + 96m_0^3 + 168m_0^2 + 78m_0 + 12$

7

Table 4 – continued from previous page

Case	(n, n_0, k)	$f(m)$
4.1.2	$(1, 0, 3)$	$(-4m_0 - 2)m + 48k_0^2m_0 + 24k_0^2 + 144k_0m_0^2 + 226k_0m_0 + 77k_0 + 96m_0^3 + 264m_0^2 + 222m_0 + 57$
4.1.3	$(2, 0, 3)$	$(-4m_0 - 2)m + 48k_0^2m_0 + 36k_0^2 + 144k_0m_0^2 + 274k_0m_0 + 125k_0 + 96m_0^3 + 312m_0^2 + 318m_0 + 105$
4.1.4	$(3, 0, 3)$	$(-4m_0 - 4)m + 48k_0^2m_0 + 48k_0^2 + 144k_0m_0^2 + 370k_0m_0 + 226k_0 + 96m_0^3 + 408m_0^2 + 558m_0 + 246$
4.2.1	$(0, 1, 3)$	$(-4m_0 - 2)m + 48k_0^2m_0 + 12k_0^2 + 144k_0m_0^2 + 154k_0m_0 + 29k_0 + 96m_0^3 + 192m_0^2 + 107m_0 + 15$
4.2.2	$(1, 1, 3)$	$(-4m_0 - 2)m + 48k_0^2m_0 + 24k_0^2 + 144k_0m_0^2 + 202k_0m_0 + 65k_0 + 96m_0^3 + 240m_0^2 + 179m_0 + 42$
4.2.3	$(2, 1, 3)$	$(-4m_0 - 4)m + 48k_0^2m_0 + 36k_0^2 + 144k_0m_0^2 + 298k_0m_0 + 142k_0 + 96m_0^3 + 336m_0^2 + 371m_0 + 128$
4.2.4	$(3, 1, 3)$	$(-4m_0 - 4)m + 48k_0^2m_0 + 48k_0^2 + 144k_0m_0^2 + 346k_0m_0 + 202k_0 + 96m_0^3 + 384m_0^2 + 491m_0 + 203$
4.3.1	$(0, 2, 3)$	$-4m_0m + 48k_0^2m_0 + 12k_0^2 + 144k_0^2m_0 + 130k_0m_0 + 24k_0 + 96m_0^3 + 168m_0^2 + 76m_0 + 12$
4.3.2	$(1, 2, 3)$	$(-4m_0 - 2)m + 48k_0^2m_0 + 24k_0^2 + 144k_0m_0^2 + 226k_0m_0 + 77k_0 + 96m_0^3 + 264m_0^2 + 220m_0 + 56$
4.3.3	$(2, 2, 3)$	$(-4m_0 - 2)m + 48k_0^2m_0 + 36k_0^2 + 144k_0m_0^2 + 274k_0m_0 + 125k_0 + 96m_0^3 + 312m_0^2 + 316m_0 + 104$
4.3.4	$(3, 2, 3)$	$(-4m_0 - 4)m + 48k_0^2m_0 + 48k_0^2 + 144k_0m_0^2 + 370k_0m_0 + 226k_0 + 96m_0^3 + 408m_0^2 + 556m_0 + 244$
4.4.1	$(0, 3, 3)$	$(-4m_0 - 2)m + 48k_0^2m_0 + 12k_0^2 + 144k_0m_0^2 + 154k_0m_0 + 29k_0 + 96m_0^3 + 192m_0^2 + 105m_0 + 13$
4.4.2	$(1, 3, 3)$	$(-4m_0 - 2)m + 48k_0^2m_0 + 24k_0^2 + 144k_0m_0^2 + 202k_0m_0 + 65k_0 + 96m_0^3 + 240m_0^2 + 177m_0 + 40$
4.4.3	$(2, 3, 3)$	$(-4m_0 - 4)m + 48k_0^2m_0 + 36k_0^2 + 144k_0m_0^2 + 298k_0m_0 + 142k_0 + 96m_0^3 + 336m_0^2 + 369m_0 + 126$
4.4.4	$(3, 3, 3)$	$(-4m_0 - 4)m + 48k_0^2m_0 + 48k_0^2 + 144k_0m_0^2 + 346k_0m_0 + 202k_0 + 96m_0^3 + 384m_0^2 + 489m_0 + 201$