```
PrimeK[n_] := FullSimplify[MangoldtLambda[n] / Log[n]]
d2[f_, n_, k_] := Sum[d2[f, j, 1] d2[f, n / j, k - 1], {j, Divisors[n]}]
d2[f_, n_, 1] := f[n]; d2[f_, 1, 1] := 0
Linnik[f_, n_] := Sum[(-1) ^ (k + 1) / k d2[f, n, k], {k, 1, Log[2, n]}]

K[n_] := FullSimplify[MangoldtLambda[n] / Log[n]]

Table[
  {n, Linnik[K, n], -PrimeK[n], "   "}, {n, 2, 100}] // TableForm
```

2	1	-1
3	1	-1
4	0	$-\frac{1}{2}$
5	1	-1
6	-1	0
7	1	-1
8	$\frac{1}{6}$	$-\frac{1}{3}$
9	0	$-\frac{1}{2}$
10	-1	0
11	1	-1
12	$\frac{1}{2}$	0
13	1	-1
14	-1	0
15	-1	0
16	$\frac{1}{24}$	$-\frac{1}{4}$
17	1	-1
18	$\frac{1}{2}$	0
19	1	-1
20	$\frac{1}{2}$	0
21	-1	0
22	-1	0
23	1	-1
24	$-\frac{1}{3}$	0
25	0	$-\frac{1}{2}$
26	-1	0
27	$\frac{1}{6}$	$-\frac{1}{3}$
28	$\frac{1}{2}$	0
29	1	-1
30	2	0
31	1	-1
32	$\frac{1}{15}$	$-\frac{1}{5}$
33	-1	0
34	-1	0
35	-1	0
36	$-\frac{3}{4}$	0
37	1	-1
38	-1	0
39	-1	0
40	$-\frac{1}{3}$	0

41	1	-1
42	2	0
43	1	-1
44	$\frac{1}{2}$	0
45	$\frac{1}{2}$	0
46	-1	0
47	1	-1
48	$\frac{1}{6}$	0
49	0	$-\frac{1}{2}$
50	$\frac{1}{2}$	0
51	-1	0
52	$\frac{1}{2}$	0
53	1	-1
54	$-\frac{1}{3}$	0
55	-1	0
56	$-\frac{1}{3}$	0
57	-1	0
58	-1	0
59	1	-1
60	-2	0
61	1	-1
62	-1	0
63	$\frac{1}{2}$	0
64	$\frac{13}{360}$	$-\frac{1}{6}$
65	-1	0
66	2	0
67	1	-1
68	$\frac{1}{2}$	0
69	-1	0
70	2	0
71	1	-1
72	$\frac{2}{3}$	0
73	1	-1
74	-1	0
75	$\frac{1}{2}$	0
76	$\frac{1}{2}$	0
77	-1	0
78	2	0
79	1	-1
80	$\frac{1}{6}$	0
81	$\frac{1}{24}$	$-\frac{1}{4}$
82	-1	0
83	1	-1
84	-2	0
85	-1	0
86	-1	0
87	-1	0
88	$-\frac{1}{3}$	0
89	1	-1

90	-2	0
91	-1	0
92	$\frac{1}{2}$	0
93	-1	0
94	-1	0
95	-1	0
96	$-\frac{7}{60}$	0
97	1	-1
98	$\frac{1}{2}$	0
99	$\frac{1}{2}$	0
100	$-\frac{3}{4}$	0

```
K[n_] := FullSimplify[MangoldtLambda[n] / Log[n]]
KS[n_, k_] := Sum[K[j] KS[Floor[n / j], k - 1], {j, 2, n}]; KS[n_, 0] := 1
RiePrimeCnt[n_] := Sum[PrimePi[n^(1 / j)] / j, {j, 1, Log[2, n]}]
K2[n_] := K2[n] = Linnik[K, n]
K2D[n_, k_] := K2D[n, k] = Sum[K2[j] K2D[Floor[n / j], k - 1], {j, 2, n}]; K2D[n_, 0] := 1
k2D[n_, k_] := K2D[n, k] - K2D[n - 1, k]
ExpK2D[n_, a_] := 1 + Sum[a^k / k! K2D[n, k], {k, 1, Log[2, n]}]
Expk2D[n_, a_] := 1 + Sum[a^k / k! k2D[n, k], {k, 1, Log[2, n]}]
D2Alt[n_, k_] := Sum[D2Alt[Floor[n / j], k - 1], {j, 2, n}]; D2Alt[n_, 0] := 1
DKS[n_] := Sum[ mm[[k + 1]] D2Alt[n, k], {k, 0, Log[2, n]}]

Table[{n, RiePrimeCnt[n], ExpK2D[n, 1] - ExpK2D[n, 0],
    "    ", KS[n, 2], (ExpK2D[n, 2] - 2 ExpK2D[n, 1] + ExpK2D[n, 0]),
    "    ", K2D[n, 1], DKS[n]}, {n, 1, 100}] // TableForm
```

1	0	0	0	0	0	0
2	1	1	0	0	1	1
3	2	2	0	0	2	2
4	$\frac{5}{2}$	$\frac{5}{2}$	1	1	2	2
5	$\frac{7}{2}$	$\frac{7}{2}$	1	1	3	3
6	$\frac{7}{2}$	$\frac{7}{2}$	3	3	2	2
7	$\frac{9}{2}$	$\frac{9}{2}$	3	3	3	3
8	$\frac{29}{6}$	$\frac{29}{6}$	4	4	$\frac{19}{6}$	$\frac{19}{6}$
9	$\frac{16}{3}$	$\frac{16}{3}$	5	5	$\frac{19}{6}$	$\frac{19}{6}$
10	$\frac{16}{3}$	$\frac{16}{3}$	7	7	$\frac{13}{6}$	$\frac{13}{6}$
11	$\frac{19}{3}$	$\frac{19}{3}$	7	7	$\frac{19}{6}$	$\frac{19}{6}$
12	$\frac{19}{3}$	$\frac{19}{3}$	8	8	$\frac{11}{3}$	$\frac{11}{3}$
13	$\frac{22}{3}$	$\frac{22}{3}$	8	8	$\frac{14}{3}$	$\frac{14}{3}$
14	$\frac{22}{3}$	$\frac{22}{3}$	10	10	$\frac{11}{3}$	$\frac{11}{3}$
15	$\frac{22}{3}$	$\frac{22}{3}$	12	12	$\frac{8}{3}$	$\frac{8}{3}$
16	$\frac{91}{12}$	$\frac{91}{12}$	$\frac{155}{12}$	$\frac{155}{12}$	$\frac{65}{24}$	$\frac{65}{24}$
17	$\frac{103}{12}$	$\frac{103}{12}$	$\frac{155}{12}$	$\frac{155}{12}$	$\frac{89}{24}$	$\frac{89}{24}$
18	$\frac{103}{12}$	$\frac{103}{12}$	$\frac{167}{12}$	$\frac{167}{12}$	$\frac{101}{24}$	$\frac{101}{24}$
19	$\frac{115}{12}$	$\frac{115}{12}$	$\frac{167}{12}$	$\frac{167}{12}$	$\frac{125}{24}$	$\frac{125}{24}$
20	$\frac{115}{12}$	$\frac{115}{12}$	$\frac{179}{12}$	$\frac{179}{12}$	$\frac{137}{24}$	$\frac{137}{24}$

	--	--	--	--	--	--
21	$\frac{115}{12}$	$\frac{115}{12}$	$\frac{203}{12}$	$\frac{203}{12}$	$\frac{113}{24}$	$\frac{113}{24}$
22	$\frac{115}{12}$	$\frac{115}{12}$	$\frac{227}{12}$	$\frac{227}{12}$	$\frac{89}{24}$	$\frac{89}{24}$
23	$\frac{127}{12}$	$\frac{127}{12}$	$\frac{227}{12}$	$\frac{227}{12}$	$\frac{113}{24}$	$\frac{113}{24}$
24	$\frac{127}{12}$	$\frac{127}{12}$	$\frac{235}{12}$	$\frac{235}{12}$	$\frac{35}{8}$	$\frac{35}{8}$
25	$\frac{133}{12}$	$\frac{133}{12}$	$\frac{247}{12}$	$\frac{247}{12}$	$\frac{35}{8}$	$\frac{35}{8}$
26	$\frac{133}{12}$	$\frac{133}{12}$	$\frac{271}{12}$	$\frac{271}{12}$	$\frac{27}{8}$	$\frac{27}{8}$
27	$\frac{137}{12}$	$\frac{137}{12}$	$\frac{283}{12}$	$\frac{283}{12}$	$\frac{85}{24}$	$\frac{85}{24}$
28	$\frac{137}{12}$	$\frac{137}{12}$	$\frac{295}{12}$	$\frac{295}{12}$	$\frac{97}{24}$	$\frac{97}{24}$
29	$\frac{149}{12}$	$\frac{149}{12}$	$\frac{295}{12}$	$\frac{295}{12}$	$\frac{121}{24}$	$\frac{121}{24}$
30	$\frac{149}{12}$	$\frac{149}{12}$	$\frac{295}{12}$	$\frac{295}{12}$	$\frac{169}{24}$	$\frac{169}{24}$
31	$\frac{161}{12}$	$\frac{161}{12}$	$\frac{295}{12}$	$\frac{295}{12}$	$\frac{193}{24}$	$\frac{193}{24}$
32	$\frac{817}{60}$	$\frac{817}{60}$	$\frac{305}{12}$	$\frac{305}{12}$	$\frac{973}{120}$	$\frac{973}{120}$
33	$\frac{817}{60}$	$\frac{817}{60}$	$\frac{329}{12}$	$\frac{329}{12}$	$\frac{853}{120}$	$\frac{853}{120}$
34	$\frac{817}{60}$	$\frac{817}{60}$	$\frac{353}{12}$	$\frac{353}{12}$	$\frac{733}{120}$	$\frac{733}{120}$
35	$\frac{817}{60}$	$\frac{817}{60}$	$\frac{377}{12}$	$\frac{377}{12}$	$\frac{613}{120}$	$\frac{613}{120}$
36	$\frac{817}{60}$	$\frac{817}{60}$	$\frac{383}{12}$	$\frac{383}{12}$	$\frac{523}{120}$	$\frac{523}{120}$
37	$\frac{877}{60}$	$\frac{877}{60}$	$\frac{383}{12}$	$\frac{383}{12}$	$\frac{643}{120}$	$\frac{643}{120}$
38	$\frac{877}{60}$	$\frac{877}{60}$	$\frac{407}{12}$	$\frac{407}{12}$	$\frac{523}{120}$	$\frac{523}{120}$
39	$\frac{877}{60}$	$\frac{877}{60}$	$\frac{431}{12}$	$\frac{431}{12}$	$\frac{403}{120}$	$\frac{403}{120}$
40	$\frac{877}{60}$	$\frac{877}{60}$	$\frac{439}{12}$	$\frac{439}{12}$	$\frac{121}{40}$	$\frac{121}{40}$
41	$\frac{937}{60}$	$\frac{937}{60}$	$\frac{439}{12}$	$\frac{439}{12}$	$\frac{161}{40}$	$\frac{161}{40}$
42	$\frac{937}{60}$	$\frac{937}{60}$	$\frac{439}{12}$	$\frac{439}{12}$	$\frac{241}{40}$	$\frac{241}{40}$
43	$\frac{997}{60}$	$\frac{997}{60}$	$\frac{439}{12}$	$\frac{439}{12}$	$\frac{281}{40}$	$\frac{281}{40}$
44	$\frac{997}{60}$	$\frac{997}{60}$	$\frac{451}{12}$	$\frac{451}{12}$	$\frac{301}{40}$	$\frac{301}{40}$
45	$\frac{997}{60}$	$\frac{997}{60}$	$\frac{463}{12}$	$\frac{463}{12}$	$\frac{321}{40}$	$\frac{321}{40}$
46	$\frac{997}{60}$	$\frac{997}{60}$	$\frac{487}{12}$	$\frac{487}{12}$	$\frac{281}{40}$	$\frac{281}{40}$
47	$\frac{1057}{60}$	$\frac{1057}{60}$	$\frac{487}{12}$	$\frac{487}{12}$	$\frac{321}{40}$	$\frac{321}{40}$
48	$\frac{1057}{60}$	$\frac{1057}{60}$	$\frac{493}{12}$	$\frac{493}{12}$	$\frac{983}{120}$	$\frac{983}{120}$
49	$\frac{1087}{60}$	$\frac{1087}{60}$	$\frac{505}{12}$	$\frac{505}{12}$	$\frac{983}{120}$	$\frac{983}{120}$
50	$\frac{1087}{60}$	$\frac{1087}{60}$	$\frac{517}{12}$	$\frac{517}{12}$	$\frac{1043}{120}$	$\frac{1043}{120}$
51	$\frac{1087}{60}$	$\frac{1087}{60}$	$\frac{541}{12}$	$\frac{541}{12}$	$\frac{923}{120}$	$\frac{923}{120}$
52	$\frac{1087}{60}$	$\frac{1087}{60}$	$\frac{553}{12}$	$\frac{553}{12}$	$\frac{983}{120}$	$\frac{983}{120}$
53	$\frac{1147}{60}$	$\frac{1147}{60}$	$\frac{553}{12}$	$\frac{553}{12}$	$\frac{1103}{120}$	$\frac{1103}{120}$
54	$\frac{1147}{60}$	$\frac{1147}{60}$	$\frac{187}{4}$	$\frac{187}{4}$	$\frac{1063}{120}$	$\frac{1063}{120}$
55	$\frac{1147}{60}$	$\frac{1147}{60}$	$\frac{195}{4}$	$\frac{195}{4}$	$\frac{943}{120}$	$\frac{943}{120}$
56	$\frac{1147}{60}$	$\frac{1147}{60}$	$\frac{593}{12}$	$\frac{593}{12}$	$\frac{301}{40}$	$\frac{301}{40}$
57	$\frac{1147}{60}$	$\frac{1147}{60}$	$\frac{617}{12}$	$\frac{617}{12}$	$\frac{261}{40}$	$\frac{261}{40}$
58	$\frac{1147}{60}$	$\frac{1147}{60}$	$\frac{641}{12}$	$\frac{641}{12}$	$\frac{221}{40}$	$\frac{221}{40}$
59	$\frac{1207}{60}$	$\frac{1207}{60}$	$\frac{641}{12}$	$\frac{641}{12}$	$\frac{261}{40}$	$\frac{261}{40}$

60	$\frac{1207}{60}$	$\frac{1207}{60}$	$\frac{641}{12}$	$\frac{641}{12}$	$\frac{181}{40}$	$\frac{181}{40}$
61	$\frac{1267}{60}$	$\frac{1267}{60}$	$\frac{641}{12}$	$\frac{641}{12}$	$\frac{221}{40}$	$\frac{221}{40}$
62	$\frac{1267}{60}$	$\frac{1267}{60}$	$\frac{665}{12}$	$\frac{665}{12}$	$\frac{181}{40}$	$\frac{181}{40}$
63	$\frac{1267}{60}$	$\frac{1267}{60}$	$\frac{677}{12}$	$\frac{677}{12}$	$\frac{201}{40}$	$\frac{201}{40}$
64	$\frac{1277}{60}$	$\frac{1277}{60}$	$\frac{2573}{45}$	$\frac{2573}{45}$	$\frac{911}{180}$	$\frac{911}{180}$
65	$\frac{1277}{60}$	$\frac{1277}{60}$	$\frac{2663}{45}$	$\frac{2663}{45}$	$\frac{731}{180}$	$\frac{731}{180}$
66	$\frac{1277}{60}$	$\frac{1277}{60}$	$\frac{2663}{45}$	$\frac{2663}{45}$	$\frac{1091}{180}$	$\frac{1091}{180}$
67	$\frac{1337}{60}$	$\frac{1337}{60}$	$\frac{2663}{45}$	$\frac{2663}{45}$	$\frac{1271}{180}$	$\frac{1271}{180}$
68	$\frac{1337}{60}$	$\frac{1337}{60}$	$\frac{2708}{45}$	$\frac{2708}{45}$	$\frac{1361}{180}$	$\frac{1361}{180}$
69	$\frac{1337}{60}$	$\frac{1337}{60}$	$\frac{2798}{45}$	$\frac{2798}{45}$	$\frac{1181}{180}$	$\frac{1181}{180}$
70	$\frac{1337}{60}$	$\frac{1337}{60}$	$\frac{2798}{45}$	$\frac{2798}{45}$	$\frac{1541}{180}$	$\frac{1541}{180}$
71	$\frac{1397}{60}$	$\frac{1397}{60}$	$\frac{2798}{45}$	$\frac{2798}{45}$	$\frac{1721}{180}$	$\frac{1721}{180}$
72	$\frac{1397}{60}$	$\frac{1397}{60}$	$\frac{2813}{45}$	$\frac{2813}{45}$	$\frac{1841}{180}$	$\frac{1841}{180}$
73	$\frac{1457}{60}$	$\frac{1457}{60}$	$\frac{2813}{45}$	$\frac{2813}{45}$	$\frac{2021}{180}$	$\frac{2021}{180}$
74	$\frac{1457}{60}$	$\frac{1457}{60}$	$\frac{2903}{45}$	$\frac{2903}{45}$	$\frac{1841}{180}$	$\frac{1841}{180}$
75	$\frac{1457}{60}$	$\frac{1457}{60}$	$\frac{2948}{45}$	$\frac{2948}{45}$	$\frac{1931}{180}$	$\frac{1931}{180}$
76	$\frac{1457}{60}$	$\frac{1457}{60}$	$\frac{2993}{45}$	$\frac{2993}{45}$	$\frac{2021}{180}$	$\frac{2021}{180}$
77	$\frac{1457}{60}$	$\frac{1457}{60}$	$\frac{3083}{45}$	$\frac{3083}{45}$	$\frac{1841}{180}$	$\frac{1841}{180}$
78	$\frac{1457}{60}$	$\frac{1457}{60}$	$\frac{3083}{45}$	$\frac{3083}{45}$	$\frac{2201}{180}$	$\frac{2201}{180}$
79	$\frac{1517}{60}$	$\frac{1517}{60}$	$\frac{3083}{45}$	$\frac{3083}{45}$	$\frac{2381}{180}$	$\frac{2381}{180}$
80	$\frac{1517}{60}$	$\frac{1517}{60}$	$\frac{6211}{90}$	$\frac{6211}{90}$	$\frac{2411}{180}$	$\frac{2411}{180}$
81	$\frac{383}{15}$	$\frac{383}{15}$	$\frac{12587}{180}$	$\frac{12587}{180}$	$\frac{4837}{360}$	$\frac{4837}{360}$
82	$\frac{383}{15}$	$\frac{383}{15}$	$\frac{12947}{180}$	$\frac{12947}{180}$	$\frac{4477}{360}$	$\frac{4477}{360}$
83	$\frac{398}{15}$	$\frac{398}{15}$	$\frac{12947}{180}$	$\frac{12947}{180}$	$\frac{4837}{360}$	$\frac{4837}{360}$
84	$\frac{398}{15}$	$\frac{398}{15}$	$\frac{12947}{180}$	$\frac{12947}{180}$	$\frac{4117}{360}$	$\frac{4117}{360}$
85	$\frac{398}{15}$	$\frac{398}{15}$	$\frac{13307}{180}$	$\frac{13307}{180}$	$\frac{3757}{360}$	$\frac{3757}{360}$
86	$\frac{398}{15}$	$\frac{398}{15}$	$\frac{13667}{180}$	$\frac{13667}{180}$	$\frac{3397}{360}$	$\frac{3397}{360}$
87	$\frac{398}{15}$	$\frac{398}{15}$	$\frac{14027}{180}$	$\frac{14027}{180}$	$\frac{3037}{360}$	$\frac{3037}{360}$
88	$\frac{398}{15}$	$\frac{398}{15}$	$\frac{14147}{180}$	$\frac{14147}{180}$	$\frac{2917}{360}$	$\frac{2917}{360}$
89	$\frac{413}{15}$	$\frac{413}{15}$	$\frac{14147}{180}$	$\frac{14147}{180}$	$\frac{3277}{360}$	$\frac{3277}{360}$
90	$\frac{413}{15}$	$\frac{413}{15}$	$\frac{14147}{180}$	$\frac{14147}{180}$	$\frac{2557}{360}$	$\frac{2557}{360}$
91	$\frac{413}{15}$	$\frac{413}{15}$	$\frac{14507}{180}$	$\frac{14507}{180}$	$\frac{2197}{360}$	$\frac{2197}{360}$
92	$\frac{413}{15}$	$\frac{413}{15}$	$\frac{14687}{180}$	$\frac{14687}{180}$	$\frac{2377}{360}$	$\frac{2377}{360}$
93	$\frac{413}{15}$	$\frac{413}{15}$	$\frac{15047}{180}$	$\frac{15047}{180}$	$\frac{2017}{360}$	$\frac{2017}{360}$
94	$\frac{413}{15}$	$\frac{413}{15}$	$\frac{15407}{180}$	$\frac{15407}{180}$	$\frac{1657}{360}$	$\frac{1657}{360}$
95	$\frac{413}{15}$	$\frac{413}{15}$	$\frac{15767}{180}$	$\frac{15767}{180}$	$\frac{1297}{360}$	$\frac{1297}{360}$
96	$\frac{413}{15}$	$\frac{413}{15}$	$\frac{15839}{180}$	$\frac{15839}{180}$	$\frac{251}{72}$	$\frac{251}{72}$
97	$\frac{428}{15}$	$\frac{428}{15}$	$\frac{15839}{180}$	$\frac{15839}{180}$	$\frac{323}{72}$	$\frac{323}{72}$
98	$\frac{428}{15}$	$\frac{428}{15}$	$\frac{16019}{180}$	$\frac{16019}{180}$	$\frac{359}{72}$	$\frac{359}{72}$

99	$\frac{428}{15}$	$\frac{428}{15}$	$\frac{16199}{180}$	$\frac{16199}{180}$	$\frac{395}{72}$	$\frac{395}{72}$
100	$\frac{428}{15}$	$\frac{428}{15}$	$\frac{16289}{180}$	$\frac{16289}{180}$	$\frac{341}{72}$	$\frac{341}{72}$

```
CoefficientList[Expand[Sum[(-1)^(k+1)/k
   (x - x^2/2 + x^3/3 - x^4/4 + x^5/5 - x^6/6 + x^7/7 - x^8/8 + x^9/9 - x^10/10 + x^11/11 - x^12/12 + x^13/13 - x^14/14 + x^15/15)^k, {k, 1, 15}]], x]
```

$$\left\{0,\ 1,\ -1,\ \frac{7}{6},\ -\frac{35}{24},\ \frac{19}{10},\ -\frac{917}{360},\ \frac{8791}{2520},\ -\frac{97933}{20160},\ \frac{310979}{45360},\ -\frac{211307}{21600},\ \frac{2928941}{207900},\right.$$

$$-\frac{102022463}{4989600},\ \frac{3875528417}{129729600},\ -\frac{6644030747}{151351200},\ \frac{160558836371}{2476656000},\ -\frac{41860718296823}{435891456000},$$

$$\frac{35293553027}{247665600},\ -\frac{206909386670887}{980755776000},\ \frac{222946511047}{718502400},\ -\frac{2953097765435161}{6538371840000},$$

$$\frac{4048383201498737}{6241173120000},\ -\frac{1385505528281720147}{1510363895040000},\ \frac{321227682389193413}{251727315840000},$$

$$-\frac{31637961096820739197}{18124366740480000},\ \frac{532082605859367335209}{226554584256000000},\ -\frac{915836470005818429891}{294520959532800000},$$

$$\frac{128971604981664481731493}{31808263629542400000},\ -\frac{515680085822635482913327}{98959042403020800000},\ \frac{8172388591240229339429}{1236988030037760000},$$

$$-\frac{6137660475478767712308263}{742192818022656000000},\ \frac{7590651157393498123372969}{742192818022656000000},$$

$$-\frac{99004614057254025411728629}{7916723392241664000000},\ \frac{1482129679331464543188757147}{97969451978990592000000},$$

$$-\frac{3549587287725892164818998597}{195938903957981184000000},\ \frac{9208272549623194815262629151}{428616352408083840000000},$$

$$-\frac{3116079463314722272345627814431}{123441509493528145920000000},\ \frac{86409579391961227158365508101}{2939083559369717760000000},$$

$$-\frac{2794172880896690580190627815647}{82294339662352097280000000},\ \frac{124835002872760774275912886689349}{3209479246831731793920000000},$$

$$-\frac{5676022861804053545955103664697851}{128379169873269271756800000000},\ \frac{705915334738411334990126159159}{14151143063631974400000000},$$

$$-\frac{684782682523628587142566133986891}{12254375306084794122240000000},\ \frac{20950344975823966851513000142863319}{336995320917331838361600000000},$$

$$-\frac{2411213366385865105158793261582819}{35095370699083079024640000000},\ \frac{100678216944924768858929105917923282943}{1334501470832634079911936000000000},$$

$$-\frac{8138350412443888771310868301181876687}{98851960802417339252736000000000},\ \frac{13241932840625178100470755887744382549}{148277941203626008879104000000000},$$

$$-\frac{6923878695413667764374871488327780957}{71892335129030792183808000000000},\ \frac{51161396925814985141462540394326217641}{495383121748477802391552000000000},$$

$$\frac{68591941958852625399487242657163913573557}{622767353055229237292236800000000000},$$

$$\frac{43656359719741837919042713471653425689217}{373660411833137542375342080000000000},$$

$$\left.-\frac{4225028965034057920413949785317401171337}{34268679744838010940948480000000000},\right\}$$

$$\frac{3\,326\,976\,242\,110\,170\,310\,344\,881\,190\,779\,742\,475\,823}{25\,701\,509\,808\,628\,508\,205\,711\,360\,000\,000\,000},$$

$$-\frac{2\,737\,226\,440\,302\,042\,639\,561\,039\,529\,064\,650\,207\,741}{20\,239\,938\,974\,294\,950\,211\,997\,696\,000\,000\,000},$$

$$\frac{10\,733\,232\,364\,329\,308\,160\,021\,687\,566\,225\,566\,063\,305\,157}{76\,333\,484\,131\,626\,669\,370\,962\,739\,200\,000\,000\,000},$$

$$-\frac{4\,353\,942\,901\,772\,217\,304\,939\,460\,341\,074\,691\,654\,111\,210\,507}{29\,922\,725\,779\,597\,654\,393\,417\,393\,766\,400\,000\,000\,000},$$

$$\frac{6\,727\,260\,924\,620\,506\,619\,240\,831\,725\,816\,724\,743\,485\,629\,407}{44\,884\,088\,669\,396\,481\,590\,126\,090\,649\,600\,000\,000\,000},$$

$$-\frac{4\,598\,887\,175\,586\,794\,699\,176\,314\,336\,343\,410\,873\,843\,058\,933}{29\,922\,725\,779\,597\,654\,393\,417\,393\,766\,400\,000\,000\,000},$$

$$\frac{30\,487\,380\,052\,758\,768\,777\,428\,413\,659\,854\,074\,941\,203\,941}{194\,303\,414\,153\,231\,522\,035\,177\,881\,600\,000\,000\,000},$$

$$-\frac{143\,176\,298\,610\,980\,050\,223\,431\,867\,962\,462\,585\,889\,675\,409\,471}{897\,681\,773\,387\,929\,631\,802\,521\,812\,992\,000\,000\,000\,000},$$

$$\frac{4\,528\,848\,743\,732\,008\,689\,237\,718\,686\,785\,787\,922\,523\,944\,771}{28\,052\,555\,418\,372\,800\,993\,828\,806\,656\,000\,000\,000\,000},$$

$$\frac{702\,317\,555\,598\,557\,310\,621\,290\,315\,712\,003\,672\,411\,047\,143}{4\,315\,777\,756\,672\,738\,614\,435\,201\,024\,000\,000\,000\,000},$$

$$-\frac{72\,179\,187\,808\,069\,453\,071\,402\,899\,222\,267\,312\,779\,863\,551\,221}{441\,827\,747\,839\,371\,615\,652\,803\,704\,832\,000\,000\,000\,000},$$

$$\frac{411\,222\,057\,300\,103\,991\,438\,481\,376\,586\,252\,925\,783\,857\,471}{2\,517\,537\,024\,725\,764\,191\,753\,867\,264\,000\,000\,000\,000},$$

$$-\frac{6\,040\,461\,925\,653\,247\,120\,749\,956\,162\,943\,049\,622\,088\,626\,893\,799}{37\,131\,382\,444\,682\,543\,860\,922\,493\,173\,760\,000\,000\,000\,000},$$

$$\frac{1\,450\,205\,434\,226\,352\,730\,613\,713\,315\,380\,161\,481\,504\,094\,784\,867\,219}{8\,985\,794\,551\,613\,175\,614\,343\,243\,348\,049\,920\,000\,000\,000\,000},$$

$$-\frac{429\,969\,329\,544\,598\,873\,167\,759\,252\,555\,028\,565\,296\,570\,708\,275\,797}{2\,695\,738\,365\,483\,952\,684\,302\,973\,004\,414\,976\,000\,000\,000\,000},$$

$$\frac{1\,209\,552\,331\,476\,680\,661\,025\,980\,112\,774\,929\,709\,633\,994\,737\,952\,333}{7\,702\,109\,615\,668\,436\,240\,865\,637\,155\,471\,360\,000\,000\,000\,000},$$

$$\frac{1\,245\,840\,141\,618\,205\,671\,902\,200\,704\,359\,589\,178\,293\,007\,411\,082\,347}{8\,087\,215\,096\,451\,858\,052\,908\,919\,013\,244\,928\,000\,000\,000\,000},$$

$$-\frac{47\,353\,572\,011\,630\,359\,312\,327\,516\,782\,009\,910\,267\,763\,260\,086\,811\,277}{314\,502\,809\,306\,461\,146\,502\,013\,517\,181\,747\,200\,000\,000\,000\,000},$$

$$\frac{80\,063\,388\,720\,118\,198\,681\,367\,680\,696\,011\,642\,074\,834\,262\,437\,663}{546\,011\,821\,712\,606\,157\,121\,551\,245\,107\,200\,000\,000\,000\,000},$$

$$-\frac{73\,231\,855\,119\,173\,710\,608\,575\,246\,069\,842\,816\,073\,347\,692\,949\,600\,267}{514\,640\,960\,683\,300\,057\,912\,385\,755\,388\,313\,600\,000\,000\,000\,000},$$

$$\frac{778\,998\,841\,783\,575\,149\,117\,200\,583\,811\,243\,294\,904\,874\,423\,527\,194\,793}{5\,661\,050\,567\,516\,300\,637\,036\,243\,309\,271\,449\,600\,000\,000\,000\,000},$$

$$\frac{1\,501\,448\,995\,604\,734\,475\,466\,495\,279\,083\,484\,022\,980\,663\,745\,662\,912\,097}{11\,322\,101\,135\,032\,601\,274\,072\,486\,618\,542\,899\,200\,000\,000\,000\,000},$$

$$-\frac{54\,075\,907\,247\,539\,055\,332\,717\,702\,807\,548\,469\,586\,546\,466\,540\,859\,193\,239}{424\,578\,792\,563\,722\,547\,777\,718\,248\,195\,358\,720\,000\,000\,000\,000\,000},$$

$$-\frac{2\,760\,580\,257\,275\,722\,723\,430\,124\,598\,391\,672\,474\,531\,932\,937\,829\,023\,713}{22\,644\,202\,270\,065\,202\,548\,144\,973\,237\,085\,798\,400\,000\,000\,000\,000},$$

$$\frac{25\,348\,468\,505\,644\,946\,927\,645\,960\,248\,211\,109\,653\,797\,516\,190\,085\,525\,731}{217\,950\,446\,849\,377\,574\,525\,895\,367\,406\,950\,809\,600\,000\,000\,000\,000},$$

$-1\,880\,034\,664\,739\,655\,060\,620\,806\,970\,621\,572\,249\,972\,122\,668\,356\,107\,264\,457 \,/\, 17\,000\,134\,854\,251\,450\,813\,019\,838\,657\,742\,163\,148\,800\,000\,000\,000\,000,$

$$\frac{24\,747\,835\,612\,285\,934\,726\,437\,906\,158\,720\,509\,006\,233\,365\,035\,406\,720\,647}{236\,112\,984\,086\,825\,705\,736\,386\,648\,024\,196\,710\,400\,000\,000\,000\,000},$$

$-233\,797\,641\,150\,874\,297\,528\,090\,419\,125\,535\,396\,245\,164\,556\,098\,604\,666\,191 \,/\, 2\,361\,129\,840\,868\,257\,057\,363\,866\,480\,241\,967\,104\,000\,000\,000\,000\,000,$

$2\,282\,711\,809\,004\,810\,035\,526\,036\,031\,076\,238\,803\,973\,970\,864\,055\,121\,902\,351 \,/\, 24\,480\,194\,190\,122\,089\,170\,748\,567\,667\,148\,714\,934\,272\,000\,000\,000\,000\,000,$

$-61\,050\,101\,403\,073\,493\,954\,520\,576\,777\,781\,619\,802\,908\,979\,930\,078\,384\,257 \,/\, 697\,441\,429\,918\,008\,238\,482\,865\,175\,702\,242\,590\,720\,000\,000\,000\,000\,000,$

$371\,348\,245\,903\,356\,150\,189\,849\,020\,963\,599\,818\,288\,775\,567\,879\,741\,103\,353 \,/\, 4\,533\,369\,294\,467\,053\,550\,138\,623\,642\,064\,576\,839\,680\,000\,000\,000\,000\,000,$

$-29\,100\,046\,172\,161\,607\,274\,686\,801\,468\,604\,903\,462\,413\,466\,237\,583\,817\,039\,491 \,/\, 380\,803\,020\,735\,232\,498\,211\,644\,385\,933\,424\,454\,533\,120\,000\,000\,000\,000,$

$6\,765\,964\,340\,093\,741\,033\,956\,321\,221\,978\,654\,036\,249\,229\,695\,896\,973\,730\,459 \,/\, 95\,200\,755\,183\,808\,124\,552\,911\,096\,483\,356\,113\,633\,280\,000\,000\,000\,000,$

$-8\,961\,934\,650\,789\,321\,382\,094\,573\,277\,866\,397\,304\,623\,436\,868\,100\,509\,553\,389 \,/\, 136\,001\,078\,834\,011\,606\,504\,158\,709\,261\,937\,305\,190\,400\,000\,000\,000\,000,$

$43\,492\,648\,476\,320\,892\,564\,805\,004\,229\,903\,007\,597\,562\,044\,861\,474\,894\,154\,813 \,/\, 714\,005\,663\,878\,560\,934\,146\,833\,223\,625\,170\,852\,249\,600\,000\,000\,000\,000,$

$-587\,891\,003\,401\,637\,113\,315\,357\,941\,759\,577\,125\,141\,625\,278\,177\,481\,384\,308\,131 \,/\, 10\,472\,083\,070\,218\,893\,700\,820\,220\,613\,169\,172\,499\,660\,800\,000\,000\,000\,000,$

$1\,080\,390\,402\,370\,743\,239\,875\,623\,101\,367\,113\,885\,391\,038\,991\,652\,440\,798\,501\,509 \,/\, 20\,944\,166\,140\,437\,787\,401\,640\,441\,226\,338\,344\,999\,321\,600\,000\,000\,000\,000,$

$-12\,726\,020\,217\,294\,111\,697\,117\,132\,267\,531\,121\,032\,698\,576\,922\,332\,415\,942\,451\,863 \,/\, 269\,282\,136\,091\,342\,980\,878\,234\,244\,338\,635\,864\,276\,992\,000\,000\,000\,000\,000,$

$9\,141\,903\,797\,045\,097\,136\,046\,133\,547\,099\,055\,694\,326\,917\,465\,012\,575\,545\,232\,923 \,/\, 211\,768\,790\,975\,537\,628\,172\,142\,239\,066\,309\,932\,770\,918\,400\,000\,000\,000\,000,$

$-899\,250\,055\,012\,528\,625\,921\,848\,091\,186\,262\,441\,415\,030\,334\,431\,937\,881\,222\,141\,697 \,/\, 22\,871\,029\,425\,358\,063\,842\,591\,361\,819\,161\,472\,739\,259\,187\,200\,000\,000\,000\,000,$

$76\,561\,437\,468\,226\,975\,238\,647\,302\,798\,674\,218\,823\,736\,017\,131\,818\,735\,596\,965\,667 \,/\, 2\,144\,159\,008\,627\,318\,485\,242\,940\,170\,546\,388\,069\,305\,548\,800\,000\,000\,000\,000,$

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$4\,857\,794\,820\,963\,272\,494\,195\,537\,210\,428\,985\,537\,677\,772\,183\,006\,001\,861\,508\,791\,617 \,/\, 205\,839\,264\,828\,222\,574\,583\,322\,256\,372\,453\,254\,653\,332\,684\,800\,000\,000\,000\,000,$

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$2\,690\,634\,449\,920\,111\,273\,609\,705\,164\,423\,142\,574\,650\,427\,830\,389\,765\,873\,482\,050\,054\,993 \,/\, 142\,646\,610\,525\,958\,244\,186\,242\,323\,666\,110\,105\,474\,759\,550\,566\,400\,000\,000\,000\,000,$

$-8\,871\,612\,281\,675\,254\,129\,008\,257\,764\,110\,397\,110\,471\,695\,526\,674\,020\,446\,234\,129\,168\,841 \,/\, 528\,320\,779\,725\,771\,274\,763\,860\,458\,022\,630\,020\,276\,887\,224\,320\,000\,000\,000\,000\,000,$

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$$34\,320\,718\,825\,669\,105\,903\,365\,887\,797\,723\,588\,363\,752\,481\,233\,246\,106\,943\,435\,164\,496\,116\,841\,/$$
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$$45\,049\,847\,438\,838\,324\,170\,568\,863\,508\,556\,121\,985\,603\,261\,716\,977\,051\,238\,400\,000\,000\,000\,000,$$
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$$357\,538\,471\,736\,812\,096\,591\,816\,377\,052\,032\,714\,171\,454\,458\,071\,246\,438\,400\,000\,000\,000\,000,$$
$$71\,583\,374\,545\,831\,135\,600\,309\,542\,064\,682\,337\,230\,018\,922\,137\,178\,029\,612\,222\,521\,178\,411\,941\,/$$
$$8\,521\,333\,576\,394\,021\,635\,438\,290\,319\,740\,113\,021\,086\,331\,250\,698\,040\,115\,200\,000\,000\,000\,000,$$
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$$460\,152\,013\,125\,277\,168\,313\,667\,677\,265\,966\,103\,138\,661\,887\,537\,694\,166\,220\,800\,000\,000\,000\,000,$$
$$19\,157\,364\,078\,579\,648\,438\,594\,040\,528\,009\,812\,939\,338\,121\,756\,818\,380\,285\,223\,955\,555\,218\,747\,/$$
$$3\,687\,115\,489\,785\,874\,746\,103\,106\,388\,349\,087\,364\,893\,124\,098\,859\,728\,896\,000\,000\,000\,000\,000,$$
$$-7\,089\,972\,935\,839\,967\,537\,788\,716\,090\,158\,332\,206\,919\,592\,399\,777\,021\,091\,621\,541\,337\,262\,173\,/$$
$$1\,743\,000\,049\,716\,958\,970\,885\,104\,838\,128\,659\,481\,585\,840\,483\,097\,326\,387\,200\,000\,000\,000\,000,$$
$$4\,473\,964\,703\,902\,971\,079\,331\,455\,495\,848\,911\,555\,778\,488\,595\,413\,708\,043\,027\,601\,682\,840\,829\,679\,/$$
$$1\,409\,215\,540\,196\,161\,327\,960\,607\,261\,627\,021\,190\,862\,152\,030\,584\,188\,384\,051\,200\,000\,000\,000\,000,$$
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$$13\,765\,231\,161\,867\,265\,718\,784\,930\,516\,503\,259\,495\,600\,996\,635\,742\,987\,878\,400\,000\,000\,000\,000,$$
$$85\,719\,875\,409\,079\,028\,149\,230\,456\,009\,907\,555\,160\,417\,620\,450\,575\,222\,025\,320\,283\,121\,302\,523\,/$$
$$44\,737\,001\,276\,068\,613\,586\,051\,024\,178\,635\,593\,360\,703\,239\,066\,164\,710\,604\,800\,000\,000\,000\,000,$$
$$-9\,942\,145\,146\,562\,498\,516\,160\,086\,593\,676\,142\,258\,450\,090\,280\,601\,820\,767\,299\,086\,447\,422\,901\,497\,/$$
$$6\,710\,550\,191\,410\,292\,037\,907\,653\,626\,795\,339\,004\,105\,485\,859\,924\,706\,590\,720\,000\,000\,000\,000\,000,$$
$$51\,087\,816\,764\,410\,042\,415\,150\,227\,116\,284\,833\,828\,340\,680\,879\,552\,761\,286\,069\,811\,639\,447\,531\,/$$
$$44\,737\,001\,276\,068\,613\,586\,051\,024\,178\,635\,593\,360\,703\,239\,066\,164\,710\,604\,800\,000\,000\,000\,000,$$
$$-548\,968\,399\,817\,561\,522\,854\,458\,562\,406\,783\,280\,096\,054\,042\,636\,565\,356\,707\,486\,889\,843\,127\,/$$
$$625\,692\,325\,539\,421\,169\,035\,678\,659\,841\,057\,249\,800\,045\,301\,624\,681\,267\,200\,000\,000\,000\,000,$$
$$67\,634\,017\,536\,463\,300\,557\,560\,932\,712\,089\,429\,268\,216\,786\,276\,762\,099\,747\,148\,062\,339\,818\,957\,/$$
$$100\,658\,252\,871\,154\,380\,568\,614\,804\,401\,930\,085\,061\,582\,287\,898\,870\,598\,860\,800\,000\,000\,000\,000,$$
$$-147\,231\,142\,155\,172\,140\,031\,383\,575\,838\,274\,313\,964\,263\,634\,862\,941\,376\,092\,618\,210\,322\,414\,439\,/$$
$$287\,062\,424\,854\,773\,603\,843\,827\,405\,146\,245\,057\,397\,845\,784\,007\,890\,226\,380\,800\,000\,000\,000\,000,$$
$$769\,322\,459\,691\,063\,394\,281\,897\,195\,114\,491\,414\,986\,558\,204\,138\,620\,178\,695\,196\,915\,675\,357\,/$$
$$1\,971\,582\,588\,288\,280\,246\,180\,133\,277\,103\,331\,438\,172\,017\,747\,306\,938\,368\,000\,000\,000\,000\,000,$$
$$-1\,892\,834\,336\,328\,787\,170\,327\,353\,365\,020\,105\,186\,830\,651\,441\,110\,006\,096\,413\,082\,921\,051\,635\,377\,/$$
$$6\,397\,391\,182\,477\,811\,742\,805\,296\,457\,544\,889\,850\,580\,563\,186\,461\,553\,616\,486\,400\,000\,000\,000\,000,$$
$$119\,200\,092\,958\,316\,430\,332\,317\,969\,640\,250\,480\,912\,074\,587\,901\,182\,258\,608\,238\,878\,237\,951\,653\,/$$
$$533\,115\,931\,873\,150\,978\,567\,108\,038\,128\,740\,820\,881\,713\,598\,871\,796\,134\,707\,200\,000\,000\,000\,000,$$
$$-179\,540\,657\,044\,013\,761\,449\,099\,514\,104\,411\,290\,220\,694\,286\,343\,490\,680\,600\,819\,761\,119\,420\,139\,/$$
$$1\,066\,231\,863\,746\,301\,957\,134\,216\,076\,257\,481\,641\,763\,427\,197\,743\,592\,269\,414\,400\,000\,000\,000\,000,$$

202 116 809 750 384 867 585 326 435 758 781 180 943 264 574 783 636 954 946 992 958 089 187 057 /
  1 599 347 795 619 452 935 701 324 114 386 222 462 645 140 796 615 388 404 121 600 000 000 000 000 ,
− 18 661 140 410 557 520 891 259 107 885 038 475 110 135 368 815 408 325 372 150 939 242 240 393 /
    197 450 345 138 204 066 135 965 940 047 681 785 511 745 777 359 924 494 336 000 000 000 000 000 ,
1 825 197 861 239 842 930 548 464 087 569 021 199 504 725 609 664 738 182 018 862 858 495 497 /
  25 915 357 799 389 283 680 345 529 631 258 234 348 416 633 278 490 089 881 600 000 000 000 000 ,
− 6 969 744 213 689 932 915 183 701 423 116 214 339 599 869 641 483 405 905 903 471 034 848 623 /
    133 278 982 968 287 744 641 777 009 532 185 205 220 428 399 717 949 033 676 800 000 000 000 000 ,
17 537 961 240 945 395 362 614 614 618 667 623 797 680 835 944 015 508 160 756 910 847 573 /
  453 329 874 041 795 049 801 962 617 456 412 262 654 518 366 387 581 747 200 000 000 000 000 ,
− 14 772 836 127 900 275 152 349 210 063 751 627 836 515 116 546 733 858 407 170 296 801 609 /
    518 091 284 619 194 342 630 814 419 950 185 443 033 735 275 871 521 996 800 000 000 000 000 ,
3 132 108 503 266 408 616 463 232 224 837 455 411 948 400 351 924 072 407 321 010 623 990 603 /
  149 598 858 433 792 366 434 647 663 760 616 046 675 991 060 907 901 976 576 000 000 000 000 000 ,
− 9 256 445 065 779 086 663 179 400 539 516 157 938 347 138 519 209 668 104 751 691 253 353 /
    604 439 832 055 726 733 069 283 489 941 883 016 872 691 155 183 442 329 600 000 000 000 000 ,
3 372 103 201 601 309 253 566 863 962 698 591 285 671 658 688 960 775 940 198 086 135 817 /
  302 219 916 027 863 366 534 641 744 970 941 508 436 345 577 591 721 164 800 000 000 000 000 ,
− 14 682 959 822 789 995 192 353 144 039 589 922 146 775 006 012 487 864 277 002 073 214 503 /
    1 813 319 496 167 180 199 207 850 469 825 649 050 618 073 465 550 326 988 800 000 000 000 000 ,
74 729 977 299 294 721 717 031 114 904 213 085 374 527 825 341 004 647 139 206 903 474 691 /
  12 768 791 452 177 227 236 088 613 725 022 278 731 435 600 653 250 219 212 800 000 000 000 000 ,
− 411 428 844 595 748 472 912 900 030 252 930 066 793 836 510 037 847 467 890 029 232 347 /
    97 663 396 159 572 323 702 600 847 984 217 603 933 620 197 304 142 848 000 000 000 000 000 ,
8 493 432 801 123 283 478 561 168 199 983 914 143 948 838 832 559 837 247 336 782 699 509 /
  2 812 705 809 395 682 922 634 904 421 945 466 993 288 261 682 359 314 022 400 000 000 000 000 ,
− 598 724 008 482 693 033 977 124 335 720 410 450 001 995 982 076 378 421 151 320 812 871 /
    277 798 104 631 672 387 420 731 300 932 885 628 966 741 894 554 006 323 200 000 000 000 000 ,
106 367 707 050 385 376 972 559 462 781 482 467 697 855 820 717 963 723 514 995 338 701 /
  69 449 526 157 918 096 855 182 825 233 221 407 241 685 473 638 501 580 800 000 000 000 000 ,
− 41 046 509 272 848 063 130 225 006 575 944 105 798 286 388 407 798 474 560 982 407 287 /
    37 881 559 722 500 780 102 826 995 581 757 131 222 737 531 075 546 316 800 000 000 000 000 ,
843 127 795 046 096 610 132 716 547 828 508 869 210 467 232 157 913 448 359 357 562 083 /
  1 104 878 825 239 606 086 332 454 037 801 249 660 663 177 989 703 434 240 000 000 000 000 000 ,
− 192 985 849 811 956 722 677 091 270 027 182 919 900 163 795 687 353 689 740 932 667 /
    360 776 759 261 912 191 455 495 196 016 734 583 073 690 772 148 060 160 000 000 000 000 000 ,
35 342 177 573 064 657 580 161 853 481 554 056 283 514 513 690 459 499 569 578 349 /
  94 703 899 306 251 950 257 067 488 954 392 828 056 843 827 688 865 792 000 000 000 000 000 ,
− 826 143 515 219 783 812 976 711 155 094 087 594 796 535 339 487 554 769 719 103 /
    3 188 683 478 324 981 490 136 952 490 046 896 567 570 499 248 783 360 000 000 000 000 000 ,
57 069 088 565 733 106 689 339 286 328 416 310 160 632 634 617 880 264 602 597 /
  318 868 347 832 498 149 013 695 249 004 689 656 757 049 924 878 336 000 000 000 000 000 ,
− 70 597 459 049 556 076 125 166 731 924 117 790 485 785 231 932 079 739 464 947 757 /
    573 963 026 098 496 668 224 651 448 208 441 382 162 689 864 781 004 800 000 000 000 000 ,
4 021 920 440 791 324 162 281 945 928 283 959 835 052 653 010 361 754 123 154 763 /
  47 830 252 174 874 722 352 054 287 350 703 448 513 557 488 731 750 400 000 000 000 000 ,
− 4 113 306 841 303 394 579 099 353 575 250 403 960 987 100 839 563 480 354 019 233 /
    71 943 023 932 456 193 951 023 804 114 281 220 078 243 495 447 756 800 000 000 000 000 ,
595 982 567 238 295 868 394 908 040 355 068 036 594 926 787 977 038 764 723 349 /
  15 416 362 271 240 612 989 505 100 881 631 690 016 766 463 310 233 600 000 000 000 000 ,
− 4 946 548 530 757 256 179 728 773 043 855 605 283 665 065 760 189 588 034 553 /
    190 325 460 138 772 999 870 433 344 217 675 185 392 178 559 385 600 000 000 000 000 ,
516 537 832 772 811 790 732 200 788 418 027 074 427 541 483 208 067 535 363 /
  29 738 353 146 683 281 229 755 210 034 011 747 717 527 899 904 000 000 000 000 000 ,
− 299 434 825 558 131 521 546 171 738 984 219 657 425 426 195 849 157 377 471 /
    25 953 471 837 105 409 073 240 910 575 137 525 280 751 621 734 400 000 000 000 000 ,

$$296\,460\,011\,670\,024\,530\,247\,736\,159\,327\,554\,042\,546\,747\,482\,043\,033\,039\,277 \big/$$
$$38\,930\,207\,755\,658\,113\,609\,861\,365\,862\,706\,287\,921\,127\,432\,601\,600\,000\,000\,000\,000,$$
$$-194\,397\,869\,023\,223\,188\,752\,698\,269\,856\,982\,887\,523\,794\,582\,503\,268\,544\,713 \big/$$
$$38\,930\,207\,755\,658\,113\,609\,861\,365\,862\,706\,287\,921\,127\,432\,601\,600\,000\,000\,000\,000,$$
$$747\,782\,788\,271\,116\,262\,852\,269\,591\,925\,219\,404\,451\,502\,415\,522\,950\,754\,307 \big/$$
$$229\,931\,539\,556\,855\,733\,508\,243\,692\,126\,609\,013\,034\,158\,898\,803\,200\,000\,000\,000\,000,$$
$$-18\,608\,658\,494\,315\,224\,877\,442\,915\,640\,588\,653\,065\,325\,541\,907\,093\,967\,169 \big/$$
$$8\,847\,774\,489\,922\,298\,547\,695\,764\,968\,796\,883\,618\,438\,052\,864\,000\,000\,000\,000\,000,$$
$$108\,601\,063\,274\,030\,591\,710\,245\,470\,174\,012\,335\,201\,265\,201\,642\,159\,671 \big/$$
$$80\,434\,313\,544\,748\,168\,615\,416\,045\,170\,880\,760\,167\,618\,662\,400\,000\,000\,000\,000,$$
$$-2\,283\,139\,195\,754\,610\,351\,960\,777\,211\,811\,563\,428\,878\,784\,704\,062\,003\,939 \big/$$
$$2\,654\,332\,346\,976\,689\,564\,308\,729\,490\,639\,065\,085\,531\,415\,859\,200\,000\,000\,000\,000,$$
$$30\,060\,871\,223\,184\,600\,333\,606\,489\,698\,600\,460\,090\,234\,233\,329\,301\,617 \big/$$
$$55\,298\,590\,562\,014\,365\,923\,098\,531\,054\,980\,522\,615\,237\,830\,400\,000\,000\,000\,000,$$
$$-13\,701\,732\,309\,731\,415\,327\,048\,275\,464\,530\,935\,414\,185\,256\,849\,224\,697 \big/$$
$$40\,217\,156\,772\,374\,084\,307\,708\,022\,585\,440\,380\,083\,809\,331\,200\,000\,000\,000\,000,$$
$$829\,942\,463\,473\,260\,843\,798\,670\,260\,695\,872\,936\,540\,491\,981\,262\,423\,259 \big/$$
$$3\,921\,172\,785\,306\,473\,220\,001\,532\,202\,080\,437\,058\,171\,409\,792\,000\,000\,000\,000\,000,$$
$$-14\,263\,748\,465\,167\,943\,671\,941\,138\,914\,541\,145\,263\,127\,563\,376\,382\,179 \big/$$
$$109\,480\,037\,880\,351\,673\,948\,760\,728\,149\,254\,368\,005\,925\,401\,600\,000\,000\,000\,000,$$
$$51\,757\,932\,959\,747\,834\,056\,630\,818\,624\,090\,957\,631\,609\,858\,500\,799 \big/$$
$$651\,666\,892\,144\,950\,440\,171\,194\,810\,412\,228\,380\,987\,651\,200\,000\,000\,000\,000,$$
$$-23\,586\,613\,095\,190\,712\,138\,421\,525\,824\,165\,336\,016\,436\,460\,197\,081 \big/$$
$$492\,168\,002\,459\,123\,409\,360\,063\,213\,458\,186\,469\,557\,107\,200\,000\,000\,000\,000,$$

$$\frac{2\,346\,374\,772\,390\,835\,268\,155\,781\,519\,370\,068\,014\,577\,591\,784\,547}{82\,028\,000\,409\,853\,901\,560\,010\,535\,576\,364\,411\,592\,851\,200\,000\,000\,000\,000},$$

$$-204\,793\,126\,803\,441\,045\,086\,502\,480\,729\,145\,045\,524\,713\,482\,019 \big/$$
$$12\,134\,319\,587\,256\,494\,313\,611\,025\,972\,834\,972\,129\,120\,000\,000\,000\,000\,000,$$

$$\frac{895\,122\,389\,437\,656\,419\,404\,037\,901\,027\,304\,932\,671\,448\,511}{91\,007\,396\,904\,423\,707\,352\,082\,694\,796\,262\,290\,968\,400\,000\,000\,000\,000},$$

$$-\frac{3\,200\,026\,178\,613\,349\,337\,877\,919\,405\,005\,390\,842\,450\,057}{565\,702\,544\,860\,442\,625\,343\,171\,374\,024\,940\,425\,600\,000\,000\,000\,000},$$

$$\frac{6\,350\,299\,238\,730\,057\,327\,357\,598\,533\,965\,439\,821\,957\,423}{1\,979\,958\,907\,011\,549\,188\,701\,099\,809\,087\,291\,489\,600\,000\,000\,000\,000},$$

$$-\frac{116\,884\,585\,111\,644\,275\,253\,847\,884\,329\,632\,143\,295\,823}{65\,273\,370\,560\,820\,302\,924\,212\,081\,618\,262\,356\,800\,000\,000\,000\,000},$$

$$\frac{6\,685\,096\,193\,605\,535\,280\,051\,981\,827\,920\,058\,517\,079}{6\,799\,309\,433\,418\,781\,554\,605\,425\,168\,568\,995\,500\,000\,000\,000\,000},$$

$$-\frac{40\,327\,450\,611\,533\,677\,774\,448\,858\,322\,385\,970\,149}{76\,076\,189\,464\,825\,527\,883\,697\,064\,823\,149\,600\,000\,000\,000\,000},$$

$$\frac{95\,911\,308\,531\,773\,976\,800\,155\,805\,290\,279\,945\,949}{342\,342\,852\,591\,714\,875\,476\,636\,791\,704\,173\,200\,000\,000\,000\,000},$$

$$-\frac{141\,294\,458\,991\,623\,844\,029\,578\,296\,994\,662\,941}{975\,335\,762\,369\,558\,049\,790\,988\,010\,553\,200\,000\,000\,000\,000},$$

$$\frac{49\,035\,241\,216\,676\,228\,369\,795\,829\,293\,728\,067}{670\,543\,336\,629\,071\,159\,231\,304\,257\,255\,325\,000\,000\,000\,000},$$

$$-\frac{141\,584\,756\,932\,706\,831\,328\,997\,388\,181\,777\,749}{3\,938\,855\,963\,415\,522\,893\,386\,682\,350\,311\,000\,000\,000\,000\,000},$$

$$\frac{12\,871\,270\,771\,906\,592\,355\,630\,212\,495\,957}{750\,258\,278\,745\,813\,884\,454\,606\,161\,964\,000\,000\,000\,000},$$

$$-\frac{4\,666\,205\,340\,126\,719\,801\,759\,985\,641}{588\,899\,747\,838\,158\,465\,035\,012\,686\,000\,000\,000\,000},$$

$$\frac{89\,032\,923\,951\,881\,148\,301\,932\,497}{25\,238\,560\,621\,635\,362\,787\,214\,829\,400\,000\,000\,000},\ -\frac{1\,172\,685\,674\,525\,136\,854\,881}{778\,189\,730\,690\,154\,376\,093\,500\,000\,000\,000},$$

$$\frac{512\,150\,463\,485\,565\,134\,137}{833\,774\,711\,453\,736\,831\,528\,750\,000\,000\,000},\ -\frac{48\,922\,387\,649\,698\,020\,307}{206\,153\,087\,996\,803\,062\,740\,625\,000\,000\,000},$$

$$\frac{2\,960\,844\,724\,872\,220\,741}{34\,358\,847\,999\,467\,177\,123\,437\,500\,000\,000},\ -\frac{499\,474\,840\,396\,787}{17\,162\,261\,737\,995\,592\,968\,750\,000\,000},$$

$$\frac{4\,737\,176\,765\,609}{525\,375\,359\,326\,395\,703\,125\,000\,000},\ -\frac{310\,392\,451}{123\,362\,299\,081\,054\,687\,500\,000},$$

$$\frac{183\,564\,377}{297\,831\,836\,352\,832\,031\,250\,000},\ -\frac{56\,939}{446\,301\,453\,076\,171\,875\,000},$$

$$\frac{223}{10\,626\,225\,073\,242\,187\,500},\ -\frac{1}{408\,700\,964\,355\,468\,750},\ \frac{1}{6\,568\,408\,355\,712\,890\,625}\Big\}$$

```
mm := {0, 1, -1, 7/6, -35/24, 19/10, -917/360, 8791/2520, -97933/20160, 310979/45360, -211307/21600, 2928941/207900}
```

```
mm[[2]]
```

1

```
d2[n_, k_] := Sum[d2[j, k - 1] d2[n / j, 1], {j, Divisors[n]}]; d2[n_, 1] := If[n < 2, 0, 1]
```

```
d2[6, 1] mm[[2]] + d2[6, 2] mm[[3]] + d2[6, 3] mm[[4]] + d2[6, 4] mm[[5]]
```

-1

```
FF[x_] := (x - 1) ^ (3 / 5)
```

```
N[FF[3]]
```

1.51572

4.23339

```
FG[x_, k_] := (x - 1)^k
FH[x_, k_] := Sum[ (-1)^j Binomial[ k, j] x^ (k - j), {j, 0, 20}]
FG[7.3 - 2.2 I, 3.65 - 3.3 I]
FH[7.3 - 2.2 I, 3.65 - 3.3 I]
```

119.893 - 314.671 i

119.893 - 314.671 i

4.23339

```
dAlt[n_, z_] := Product[Pochhammer[z, a = p[[2]]] / a!, {p, FI[n]}];
FI[n_] := FactorInteger[n]; FI[1] := {}
d2Alt[n_, k_, t_] := Sum[(-1) ^ j Binomial[k, j] dAlt[n, k - j], {j, 0, t}]
p2Alt[n_, k_, t_] := Sum[(-1) ^ j Binomial[k, j] Expk2D[n, k - j], {j, 0, t}]
```

```
d2Alt[30, 1.2, 10 000]
p2Alt[30, 1.2, 10 000]
```

-1.81433×10^6

-1.81556×10^6