```
Clear[zt]
zt[fn_, 0, k_] := 0
zt[ fn_, n_, 1] := zt[fn, n, 1] = fn[n]
zt[fn_, n_, k_] := If[ n < k, 0, zt[fn, n, k] = zt[fn, n, k - 1] - zt[fn, n - 1, k - 1]]

FI[n_] := FactorInteger[n]; FI[1] := {}
dz[n_, z_] := Product[(-1)^p[[2]] Binomial[-z, p[[2]]], {p, FI[n]}]
id2[n_] := If[ n < 2, 0, FullSimplify[MangoldtLambda[ n] / Log[n]]]

Grid@Table[zt[id2, n, k], {n, 0, 20}, {k, 1, 7}]
```

0	0	0	0	0	0	0
0	0	0	0	0	0	0
1	1	0	0	0	0	0
1	0	-1	0	0	0	0
$\frac{1}{2}$	$-\frac{1}{2}$	$-\frac{1}{2}$	$\frac{1}{2}$	0	0	0
1	$\frac{1}{2}$	1	$\frac{3}{2}$	1	0	0
0	-1	$-\frac{3}{2}$	$-\frac{5}{2}$	-4	-5	0
1	1	2	$\frac{7}{2}$	6	10	15
$\frac{1}{3}$	$-\frac{2}{3}$	$-\frac{5}{3}$	$-\frac{11}{3}$	$-\frac{43}{6}$	$-\frac{79}{6}$	$-\frac{139}{6}$
$\frac{1}{2}$	$\frac{1}{6}$	$\frac{5}{6}$	$\frac{5}{2}$	$\frac{37}{6}$	$\frac{40}{3}$	$\frac{53}{2}$
0	$-\frac{1}{2}$	$-\frac{2}{3}$	$-\frac{3}{2}$	-4	$-\frac{61}{6}$	$-\frac{47}{2}$
1	1	$\frac{3}{2}$	$\frac{13}{6}$	$\frac{11}{3}$	$\frac{23}{3}$	$\frac{107}{6}$
0	-1	-2	$-\frac{7}{2}$	$-\frac{17}{3}$	$-\frac{28}{3}$	-17
1	1	2	4	$\frac{15}{2}$	$\frac{79}{6}$	$\frac{45}{2}$
0	-1	-2	-4	-8	$-\frac{31}{2}$	$-\frac{86}{3}$
0	0	1	3	7	15	$\frac{61}{2}$
$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$-\frac{3}{4}$	$-\frac{15}{4}$	$-\frac{43}{4}$	$-\frac{103}{4}$
1	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{1}{4}$	1	$\frac{19}{4}$	$\frac{31}{2}$
0	-1	$-\frac{7}{4}$	$-\frac{9}{4}$	$-\frac{5}{2}$	$-\frac{7}{2}$	$-\frac{33}{4}$
1	1	2	$\frac{15}{4}$	6	$\frac{17}{2}$	12
0	-1	-2	-4	$-\frac{31}{4}$	$-\frac{55}{4}$	$-\frac{89}{4}$