

Triangle in A317014

| | | | | | | | | | |
|-----|---|---|---|---|---|---|---|---|-----|
| k | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ... |
|-----|---|---|---|---|---|---|---|---|-----|

| n | Row Sum | | | | | | | | |
|-----|--------------|--------------|--------------|-------------|-----------|----------|--------|------|---|
| | σ_n | | | | | | | | |
| 0 | 1 | 1 | | | | | | | |
| 1 | 7 | 7 | | | | | | | |
| 2 | 50 | 49 | 1 | | | | | | |
| 3 | 357 | 343 | 14 | | | | | | |
| 4 | 2549 | 2401 | 147 | 1 | | | | | |
| 5 | 18200 | 16807 | 1372 | 21 | | | | | |
| 6 | 129949 | 117649 | 12005 | 294 | 1 | | | | |
| 7 | 927843 | 823543 | 100842 | 3430 | 28 | | | | |
| 8 | 6624850 | 5764801 | 823543 | 36015 | 490 | 1 | | | |
| 9 | 47301793 | 40353607 | 6588344 | 352947 | 6860 | 35 | | | |
| 10 | 337737401 | 282475249 | 51883209 | 3294172 | 84035 | 735 | 1 | | |
| 11 | 2411463600 | 1977326743 | 403536070 | 29647548 | 941192 | 12005 | 42 | | |
| 12 | 17217982601 | 13841287201 | 3107227739 | 259416045 | 9882516 | 168070 | 1029 | 1 | |
| 13 | 122937341807 | 96889010407 | 23727920916 | 2219448385 | 98825160 | 2117682 | 19208 | 49 | |
| 14 | 877779375250 | 678223072849 | 179936733613 | 18643366434 | 951192165 | 24706290 | 302526 | 1372 | 1 |

⋮

The row sums give A054413, and the limit of their ratio is a Metallic mean.

$$\lim_{n \rightarrow \infty} \left(\frac{\sigma_n}{\sigma_{n-1}} \right) \rightarrow 7.140054944640259 \dots$$