## Irish Logarithms Animation

In 1909 Percy E. Ludgate proposed a programmable calculator which performed multiplications using a simplified kind of logarithm he called index, but it is better known as Irish logarithm.

| Table 1 |  |
| :--- | :---: |
| unit | simple index no. |
| 0 | 50 |
| 1 | 0 |
| 2 | 1 |
| 3 | 7 |
| 4 | 2 |
| 5 | 23 |
| 6 | 8 |
| 7 | 33 |
| 8 | 3 |
| 9 | 14 |

You can test his method by entering two numbers below, and hitting the "Go"-button. Note that the numbers should be consistent with the "base" setting!


Table 3

| Table 3 |  |
| :---: | :---: |
| comp. index no. | partial product |
| 0 | 1 |
| 1 | 2 |
| 2 | 4 |
| 3 | 8 |
| 4 | 16 |
| 5 | 32 |
| 6 | 64 |
| 7 | 3 |
| 8 | 6 |
| 9 | 12 |
| 10 | 24 |
| 11 | 48 |
| 12 | - |
| 13 | - |
| 14 | 9 |
| 15 | 18 |
| 16 | 36 |
| 17 | 72 |
| 18 | - |
| 19 | - |
| 20 | - |
| 21 | 27 |
| 22 | 54 |
| 23 | 5 |
| 24 | 10 |
| 25 | 20 |
| 26 | 40 |
| 27 | - |
| 28 | 81 |
| 29 | - |
| 30 | 15 |
| 31 | 30 |
| 32 | - |
| 33 | 7 |
| 34 | 14 |
| 35 | 28 |

Animation speed:
intermediate $\checkmark$
Base:
○ 2
$\bigcirc 8$

- 10

| 36 | 56 |
| :---: | :---: |
| 37 | 45 |
| 38 | - |
| 39 | - |
| 40 | 21 |
| 41 | 42 |
| 42 | - |
| 43 | - |
| 44 | - |
| 45 | - |
| 46 | 25 |
| 47 | 63 |
| 48 | - |
| 49 | - |
| 50 | 0 |
| 51 | 0 |
| 52 | 0 |
| 53 | 0 |
| 54 | - |
| 55 | - |
| 56 | 35 |
| 57 | 0 |
| 58 | 0 |
| 59 | - |
| 60 | - |
| 61 | - |
| 62 | - |
| 63 | - |
| 64 | 0 |
| 65 | - |
| 66 | 49 |
| 73 | 0 |
| $\underline{83}$ | 0 |
| 100 | 0 |

