| symbols | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | $Ma$ | **Mi**$_2$ | | | | | | | | | | |
| 9 | | | | | | | | | | | | |
| 8 | $Ba$ | | | | | | | | | | | |
| 7 | | $Da$ | | | | | | | | | | |
| 6 | | $Ma$ | **Mi**$_2$ | | | | | | | | | |
| 5 | | $Ba$ | | | | | | | | | | |
| 4 | | $Mi_2$ | $Ma$ | **Mi**$_2$ | | | | | | | | |
| 3 | | | | $Ma$ | **Mi**$_1$ | | | | | | | |
| 2 | | | | | | | | $Yj$ | $Ba$ | $Ma$ | | **Mi**$_2$ |
| | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | states |

Table 1: Turing machines simulating the $3x + 1$ function: $Ma$ = Margenstern [4, 5], $Ba$ = Baiocchi [1], $Mi_1$ = Michel [6], $Mi_2$ = Michel [7]. $Da$ = Daniel [10]. $Yj$ = Yijun Leng (this repo). In roman boldface, halting machines. Green: unary; Blue: base 2; Red: base 3;

This tex copy from [7], thanks!
Preliminaries and background: see [7].

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