



⑦  $\begin{matrix} D \\ 2 \end{matrix} \rightarrow \begin{matrix} M \\ 1 \end{matrix} \Rightarrow$  David a bcp de choix  $\rightarrow$  gagne?

$2 \rightarrow \begin{matrix} M \\ 4 \end{matrix} \rightarrow \begin{matrix} D \\ 8 \end{matrix} \rightarrow \begin{matrix} M \\ 1 \end{matrix}$  mauvais?

$2 \rightarrow \begin{matrix} M \\ 6 \end{matrix} \rightarrow \begin{matrix} D \\ 3 \end{matrix} \rightarrow \begin{matrix} M \\ 9 \end{matrix} \rightarrow \begin{matrix} D \\ 1 \end{matrix} \rightarrow \begin{matrix} M \\ 7 \end{matrix} \underline{G}$

$\swarrow$   
 $\begin{matrix} D \\ 1 \end{matrix} \rightarrow \begin{matrix} M \\ 7 \end{matrix} \underline{G}$

$\rightarrow \underline{6}$

⑨  $E=5$ ,  $D, F, H$  pairs  $\rightarrow A, B, C, I$

$6 \mid D5F$

•  $F=2 \rightarrow D=8$

$7 \mid EFG = 52G \rightarrow G=5$   $\nrightarrow$  imposs.

•  $F=4 \rightarrow D=6$

$7 \mid EFG = 54G \rightarrow G=6$  imposs.

•  $F=6 \rightarrow D=4$

$7 \mid EFG = 56G \rightarrow G=7$

$8 \mid FGH = 67H \rightarrow H=2$

$9 \mid GHI = 72I \rightarrow I=9$

ABC456729

$4 \mid BC4 \rightarrow C$  pair  $\rightarrow C=8$

$A < B$  donc 138456729 OK

•  $F=8 \rightarrow D=2$

$7 \mid EFG = 58G \rightarrow G=1$  (8 pas bon)

$8 \mid FGH = 81H \rightarrow H=6$

$9 \mid GHI = 16I \rightarrow I=2$  imposs. (D)

8

0

00

000 000

7:

00000000 1

0<sup>x</sup>0<sup>x</sup>0<sup>x</sup>0<sup>x</sup>0<sup>x</sup> 5

0<sup>x</sup>0<sup>x</sup>0<sup>2</sup>0<sup>x</sup>0<sup>x</sup> 3

0<sup>o</sup>0<sup>o</sup>0<sup>o</sup> 1

0<sup>o</sup>0<sup>o</sup>0<sup>o</sup>0<sup>o</sup> x 2

12

1 1 2 3 5 8

0 1 1 2 3

1 0 1 1

9:

0000000000 1

0<sup>x</sup>0<sup>x</sup>0<sup>x</sup>0<sup>x</sup>0<sup>x</sup>0<sup>x</sup> 7

0<sup>x</sup>0<sup>x</sup>0<sup>2</sup>0<sup>x</sup>0<sup>x</sup> 5

0<sup>x</sup>0<sup>x</sup>0<sup>3</sup>0<sup>x</sup> 3

00<sup>x</sup>0<sup>x</sup>0<sup>o</sup>0<sup>o</sup> 4

0<sup>o</sup>0<sup>o</sup>0<sup>o</sup>0<sup>o</sup> 1

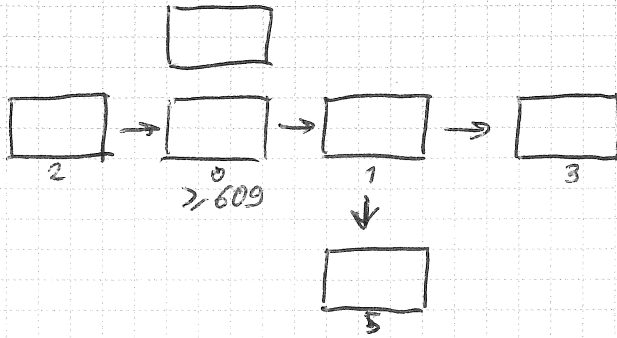
0<sup>o</sup>0<sup>o</sup>0<sup>o</sup>0<sup>o</sup>0<sup>o</sup> x 4

0<sup>o</sup>0<sup>o</sup>0<sup>o</sup>0<sup>o</sup> 1

26?

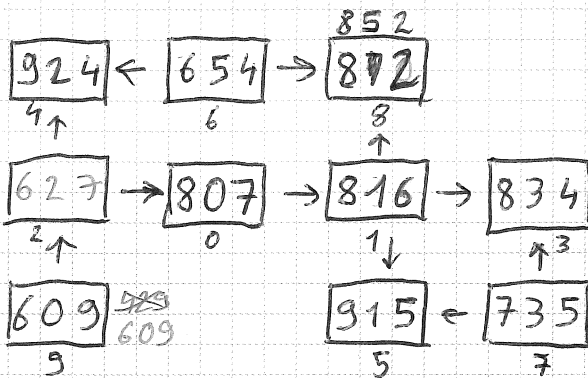


⑬ 0: 069, 078



1: 618, 681, 816, 861, ~~915~~, ~~951~~  
(5) (5)

0: 609, ~~690~~, ~~710~~ 807, ~~870~~  
(1) (1)



Si 0: 609, 1 pas 618  
(cause (8) et (6))  
idem 681

0: 807

1: 816 ou 861

~~2: 825, 836, 845, 870, 870~~  
~~81~~

8: 825, 834, 843, 852

→ 1: 816

5: 825, 852, 915

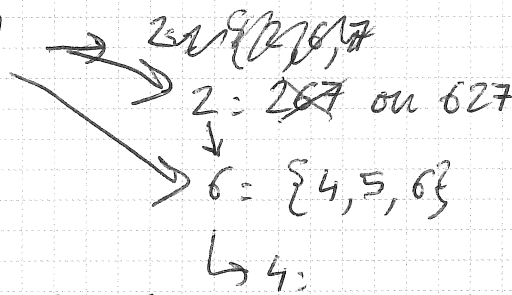
3: 834, 843

→ 8: 825 ou 852 ]

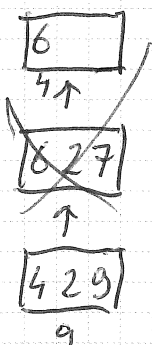
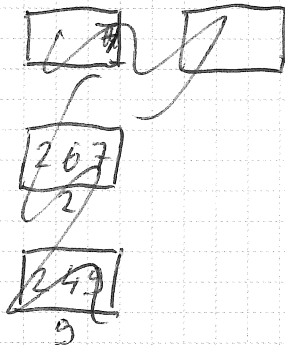
→ 5: 915

→ 7: 375 ou 735

→ 3: 834



- 924
- 627
- 609
- 654
- 807
- 852
- 816
- 915
- 834
- 735
- 7773



$$\textcircled{14} \quad a^2 \quad 1 < a < 1000$$

$$2013 \mid (a+1)(a-1)$$

$$2013 = 3 \times 11 \times 61$$

$$a \neq \begin{matrix} 60 \\ 92 \\ 124 \end{matrix}$$

$$671 \neq 11 \pm 2$$

$$669 \text{ et } 671 \rightarrow \underline{670}$$

$$33 \neq 2$$

$$3 \times 61 = 183$$

$$60 \neq 11$$

$$11 \mid 183 \pm 2 \text{ non}$$

$$366 \pm 2$$

$$549 \pm 2$$

$$732 \pm 2$$

$$915 \pm 2$$

$$913 \text{ et } 915$$

$$\rightarrow \underline{914}$$