

Division of 998001 by 999

(on a 3:5 abacus)

1/9	2/9	3/9	4/9	5/9	6/9	7/9	8/9
1/9>1+1	2/9>2+2	3/9>3+3	4/9>4+4	5/9>5+5	6/9>6+6	7/9>7+7	8/9>8+8

Rules of division by 9

$$9/9 > 9+9$$

Rule for multi-digit divisor

9 9 8 0 0 1 9 9 9

A B C D E F G H I J K L M

Enter dividend 998001 in A-F
Optionally, enter divisor 999 in K-M

9 18 8 0 0 1 9 9 9

A B C D E F G H I J K L M

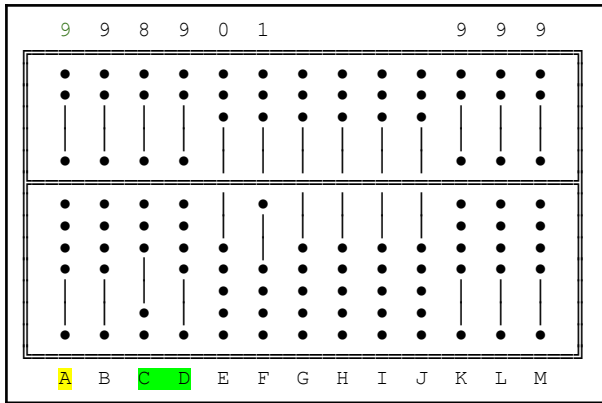
Focus on A and use rule:
 $9/9 > 9+9$

i.e change 9 in A to 9 (nothing to do) and add 9 to B

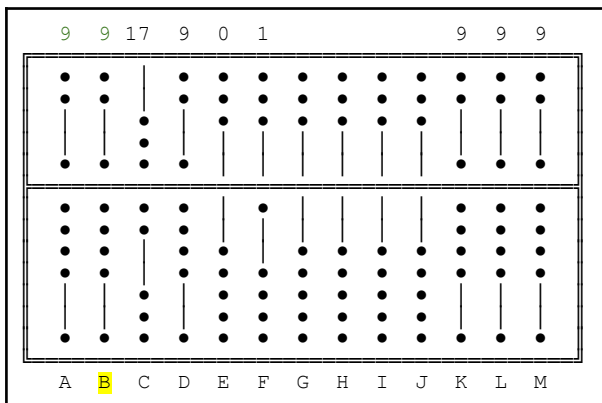
9 10 7 0 0 1 9 9 9

A B C D E F G H I J K L M

Subtract $A \times L = 9 \times 9 = 81$ from BC

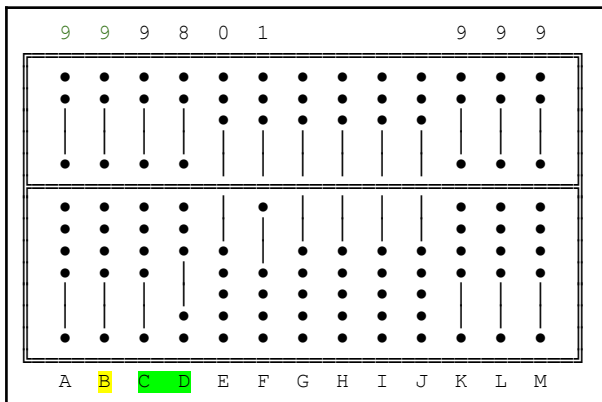


Subtract $A \times M = 9 \times 9 = 81$ from CD

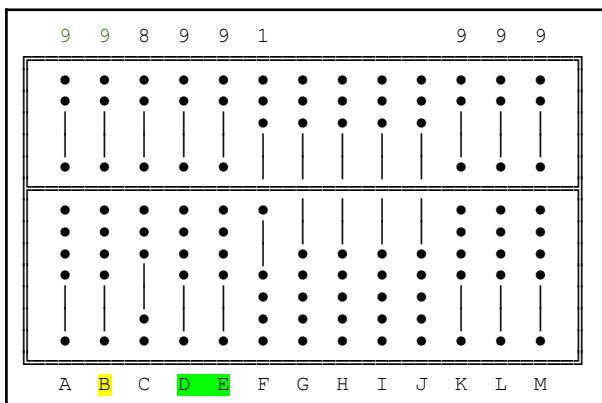


Focus on B and use rule:
 $9/9 > 9+9$

i.e change 9 in B to 9 (nothing to do) and add 9 to C, which leads to next diagram



Subtract $B \times L = 9 \times 9 = 81$ from CD



Subtract $B \times M = 9 \times 9 = 81$ from DE

