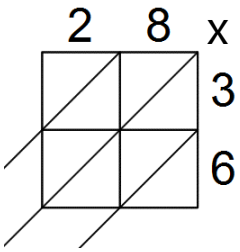
MJN-Den Arabiske Multiplikation (Gitter- Multiplikation):

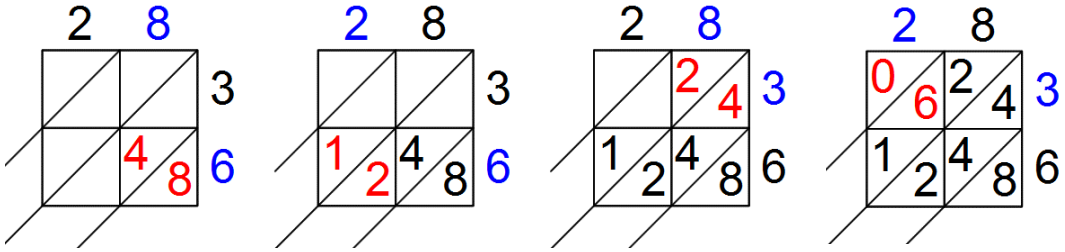
STEP 1

For at multiplicere vha. den arabiske metode tegnes et gitter med kvadrater el. rektangler afhængigt af antal cifre. Derefter tegnes diagonale linjer i gitteret. Skriv tallene som skal multipliceres.



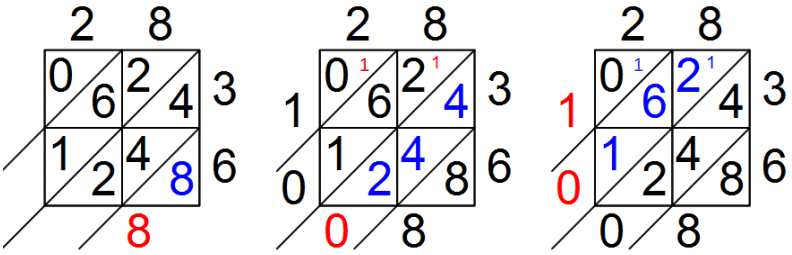
STEP 2

Multiplicer kolonnerne med rækkerne og opdel produkterne på hver side af diagonalen.



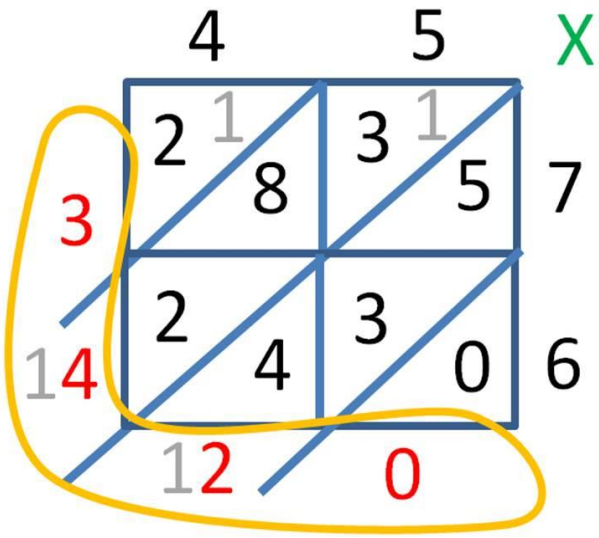
STEP 3

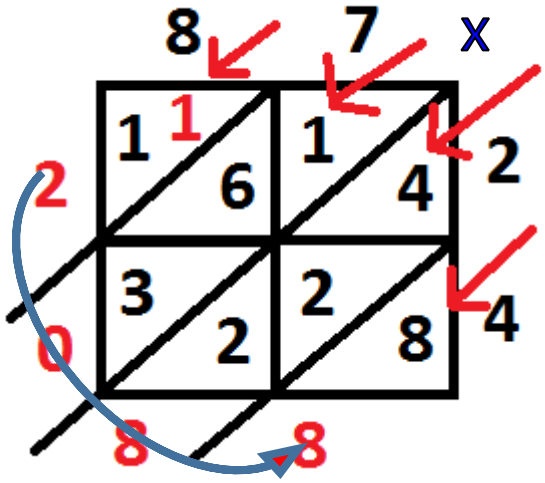
Endelig lægges tallene sammen langs diagonalerne og svaret opnås.

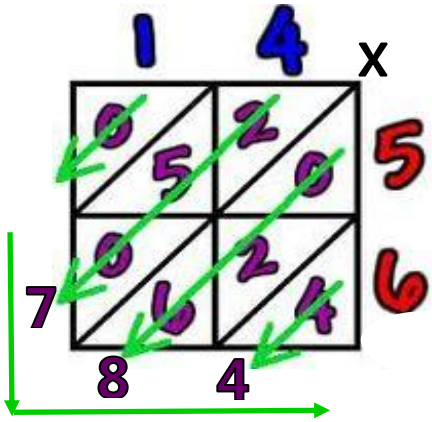


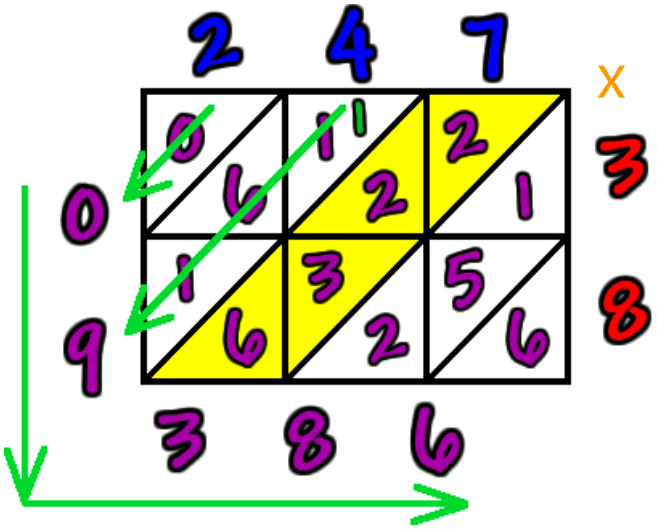
Svaret: 28 x 36 = 1008

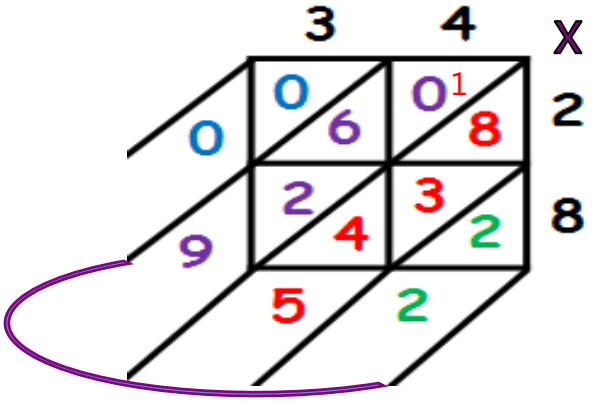
Eksempler:

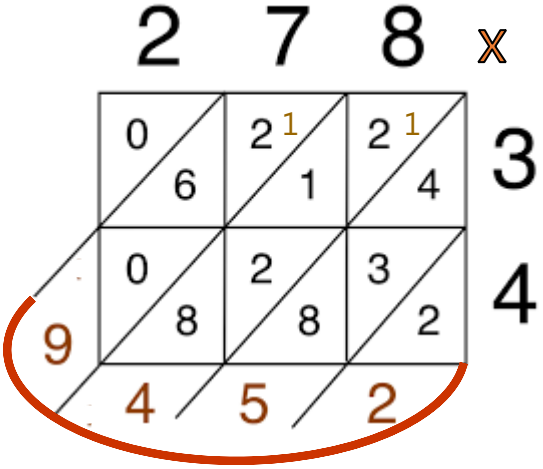

4 5 X
2 1 8
3 1 5
7
3
2 4
3 0
6
14
12 0

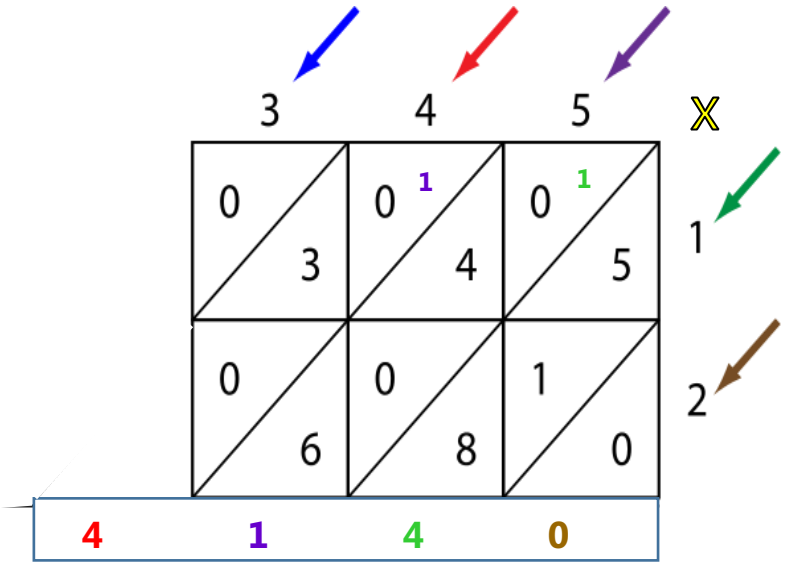

8 7 X
1 1 6
1 4
2
2
3 2
2 8
4
0
8 8

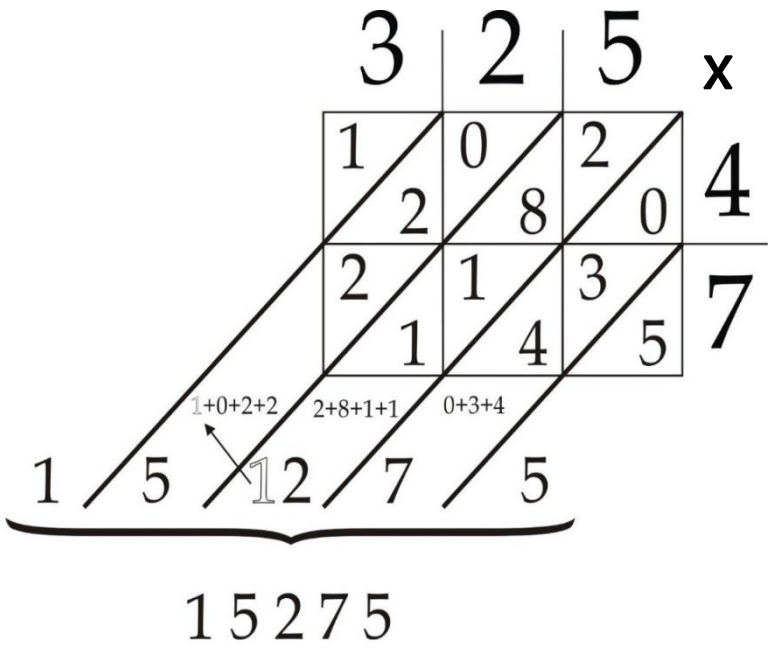

1 4 X
0 5 2 0
5
0 6 2 4
6
7
8 4

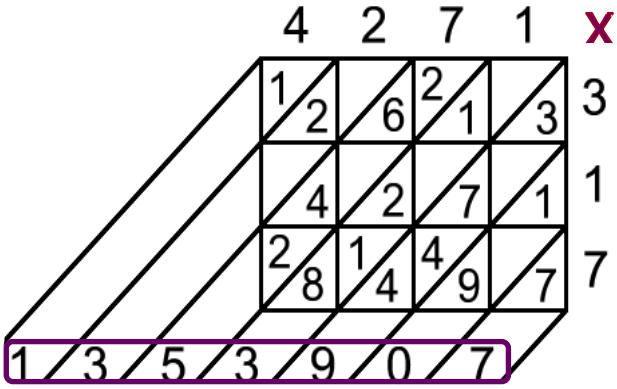

2 4 7 X
0 6 1 2 2 1
3
1 6 3 2 5 6
8
0
9
3 8 6


3 4 X
0 6 0 1 8
2
2 4 3 2
8
0
9
5 2


2 7 8 X
0 6 2 1 1 2 1 4
3
0 8 2 8 3 2
4
9
4 5 2







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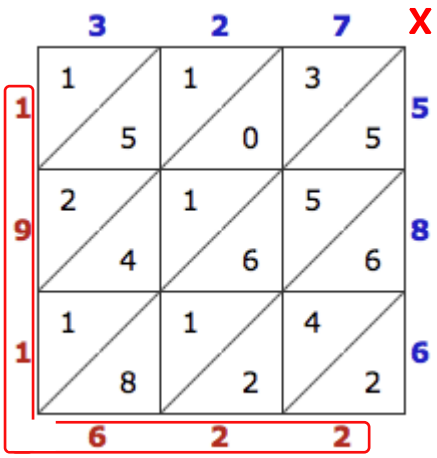

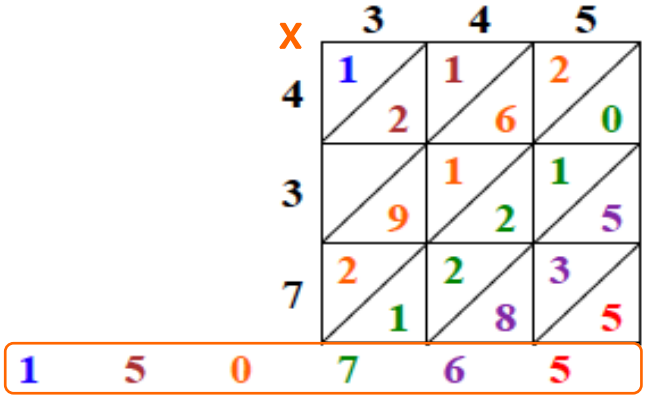

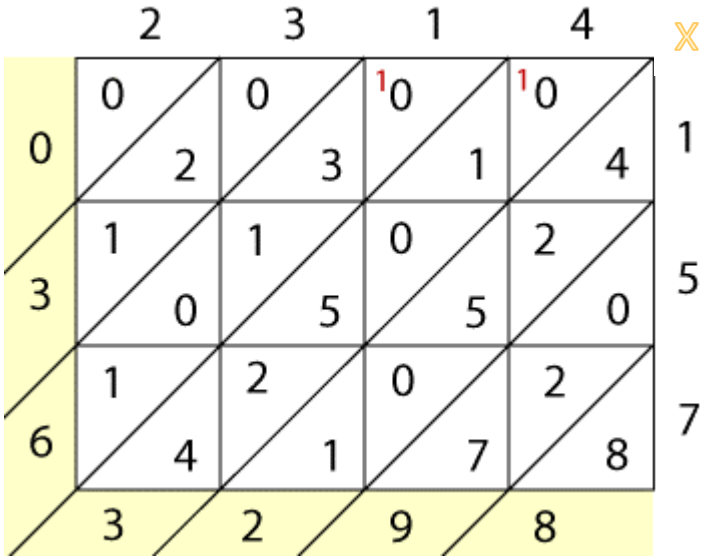

Eksempel på multiplikation af romertal:

Romertal var svært at *skrive* og de optager meget plads, især til at foretage *beregninger af fire regningsarter*.

Ved beregning af 123 x 11 på romertal er:

CXXIII x XI
= (CxX + CxI) + (XxX + XxI) + (XxX + XxI) + (IxX + IxI) + (IxX + IxI) + (IxX + IxI)
= (M + C) + (C + X) + (C + X) + (X + I) + (X + I) + (X + I)
= MCCXCXXIXIXI
= MCCCXXXXXIII
= MCCCLIII
= 1353

Mohamad J. Nasser **Tilst skole** **(Aarhus-Danmark 2016)**