

written methods

addition and subtraction

KS1

$$15 + 6 =$$

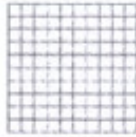




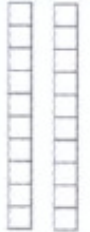

$$\begin{array}{r} 15 \\ +6 \\ \hline 21 \end{array}$$

$$7 - 3$$

$$\begin{array}{r} 7 \\ -3 \\ \hline \end{array}$$








### Calculation Mat

100s 	10s 	1s 
		
		

$$\begin{array}{r}
 32 \\
 + 25 \\
 \hline
 \hline
 \end{array}$$

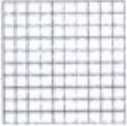





### Calculation Mat

100s 	10s 	1s 
		

$$\begin{array}{r}
 32 \\
 + 25 \\
 \hline
 57
 \end{array}$$

$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 3 \quad 5 \quad 4 \\ + 2 \quad 2 \quad 3 \\ \hline 5 \quad 7 \quad 7 \\ \hline \end{array}$$

### Calculation Mat

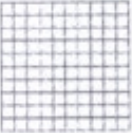




100s 	10s 	1s 
		
		

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$$\begin{array}{r}
 47 \\
 + 5 \\
 \hline \\
 \hline
 \end{array}$$

Addition with regrouping

**Calculation Mat**

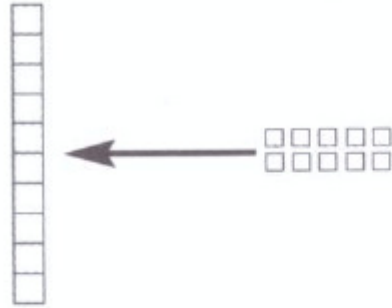
100s	10s	1s
		
		

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$$\begin{array}{r} 47 \\ + 5 \\ \hline \\ \hline \end{array}$$



Regroup 10 ones as 1 ten



Calculation Mat

100s	10s	1s

$$\begin{array}{r} 47 \\ + 5 \\ \hline 52 \\ \hline 1 \end{array}$$

$$\begin{array}{r} 389 \\ + 542 \\ \hline 931 \\ \hline \cancel{9} \quad \cancel{3} \end{array}$$

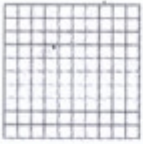




789 + 642 becomes

$$\begin{array}{r} 789 \\ + 642 \\ \hline 1431 \\ \hline 1 \quad 1 \end{array}$$

Answer: 1431

# subtraction

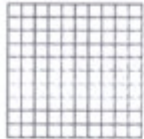






**Calculation Mat**

100s 	10s 	1s 
		

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$$37 - 16 =$$

### Calculation Mat

100s	10s	1s
		
		
		

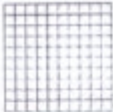


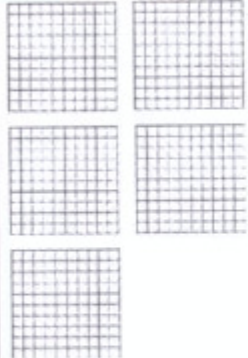


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$$\begin{array}{r}
 37 \\
 -16 \\
 \hline
 21
 \end{array}$$

$$37 - 16 = 21$$

# subtraction: decomposition method




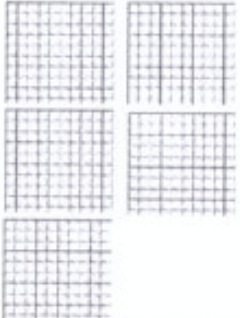


Calculation Mat

100s	10s	1s
		
		

$$\begin{array}{r} 532 \\ - 254 \\ \hline \end{array}$$




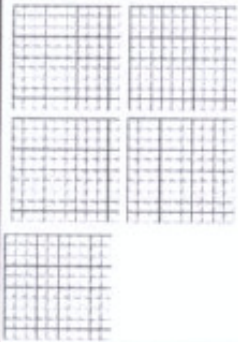
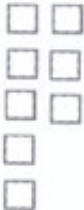
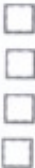
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Calculation Mat

100s 	10s 	1s 
		




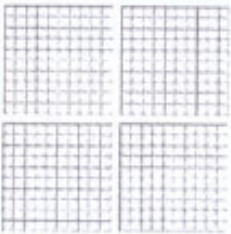


$$\begin{array}{r}
 523 \\
 - 12 \\
 \hline
 254 \\
 \hline
 \hline
 \end{array}$$

Calculation Mat

100s 	10s 	1s 
		
		

$$\begin{array}{r}
 523 \\
 - 12 \\
 \hline
 511 \\
 \hline
 511
 \end{array}$$




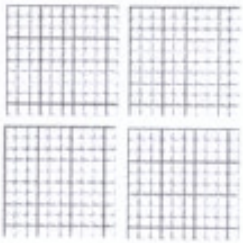

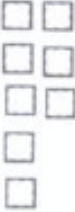


Calculation Mat

100s 	10s 	1s 
		

$$\begin{array}{r}
 4\cancel{5}^{12} \cancel{3}^{12} \phantom{0} \\
 \underline{254} \\
 8
 \end{array}$$












Calculation Mat

100s 	10s 	1s 
		
		

$$\begin{array}{r}
 4812 - 312 \\
 \underline{\phantom{0000}} \\
 254 \\
 \underline{\phantom{0000}} \\
 78
 \end{array}$$

Calculation Mat

100s 	10s 	1s 
		
		

$$\begin{array}{r}
 4512 - 12 \\
 \underline{254} \\
 278
 \end{array}$$

try a few of your own