division

Mentally

Short column method

$$\begin{array}{r} 12\ r3 \\ 4\overline{)\,51} \\ {\scriptstyle 1} \end{array}$$

Long column method

$$\begin{array}{r} 12 \\ 4\overline{)\,51} \\ 4 \\ \hline 11 \\ 8 \\ \hline 3 \end{array}$$

Simple picture

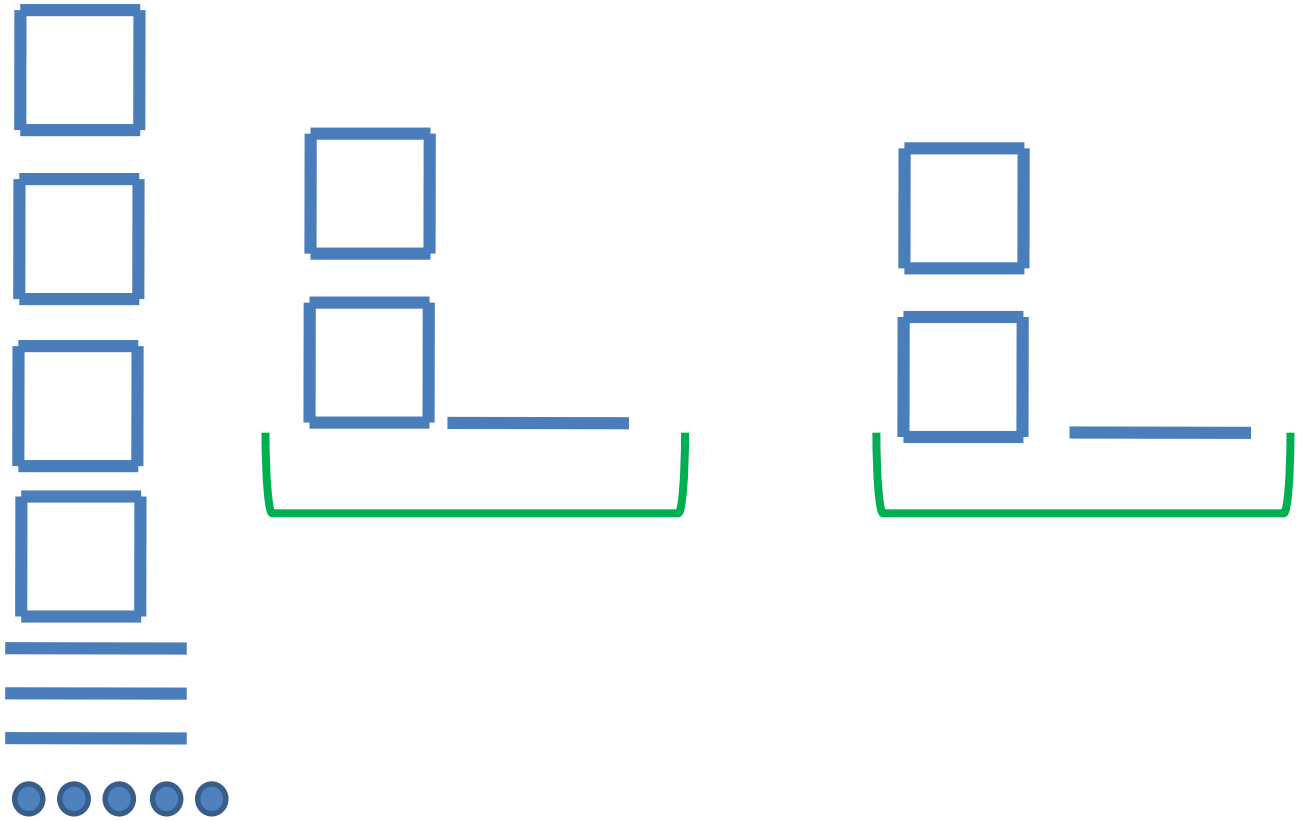
Row method

$51 \div 4 = 12r3$

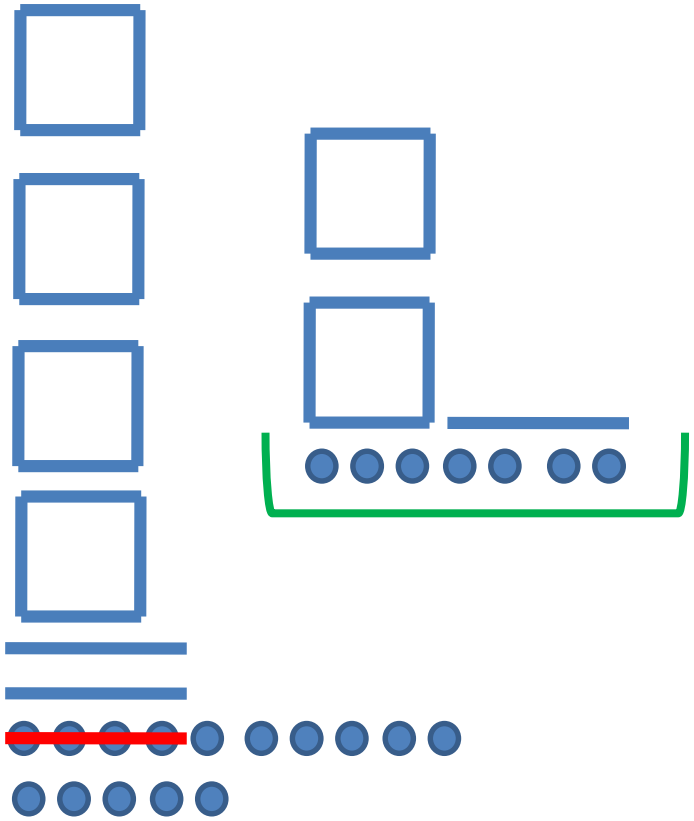
$40 \div 4 = 10$

$11 \div 4 = 2r3$

$435 \div 2$



$435 \div 2$

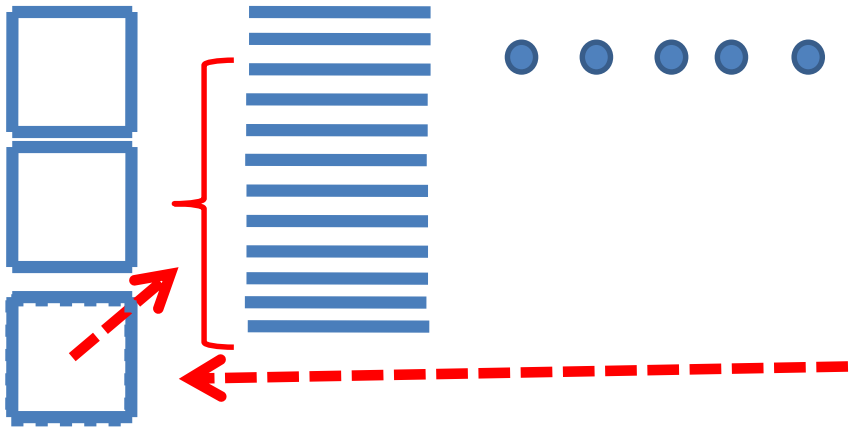


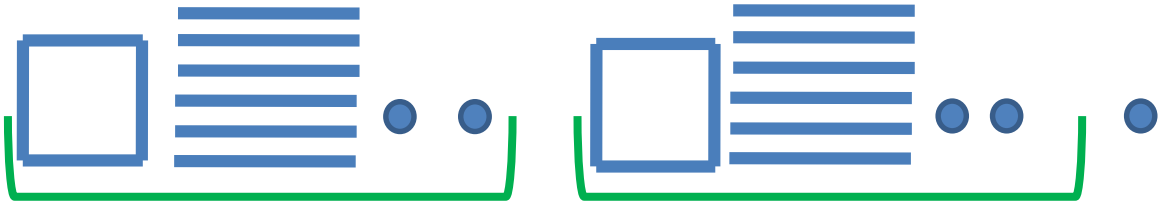
Long column:

hundreds tens ones

$$
\begin{array}{r|l}
 & 217 \\
\hline
2 & 435 \\
 & 4 \quad\quad 2\times200 \\
\hline
 & 3 \\
 & 2 \quad\quad 2\times10 \\
\hline
 & 15 \\
 & 14 \quad\quad 2\times7 \\
\hline
 & 1
\end{array}
$$

$325 \div 2$





hundreds tens ones

$$
\begin{array}{r}
162 \\
2\overline{)325} \\
2 \\
\hline
12 \\
12 \\
\hline
5 \\
4 \\
\hline
1
\end{array}
$$

2×100

2×60

2×2

$734 \div 3 =$

Simple picture takes too much time!

Let's try long column method !

$734 \div 3 =$

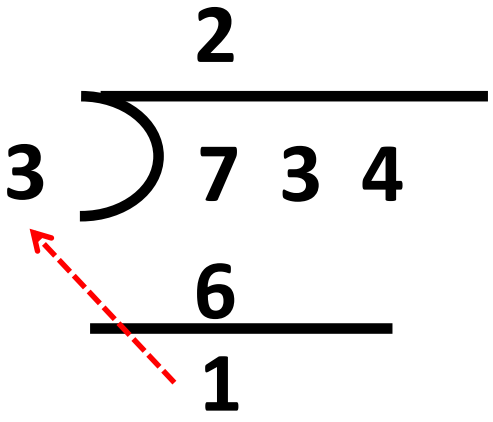
Focus on hundreds

Step 1 Try quotient

Step 2 Multiplication: to find out how many hundreds have been shared out

Step 3 Subtraction: to find how many hundreds left

Step 4 Check: the remainder must be less than the divisor



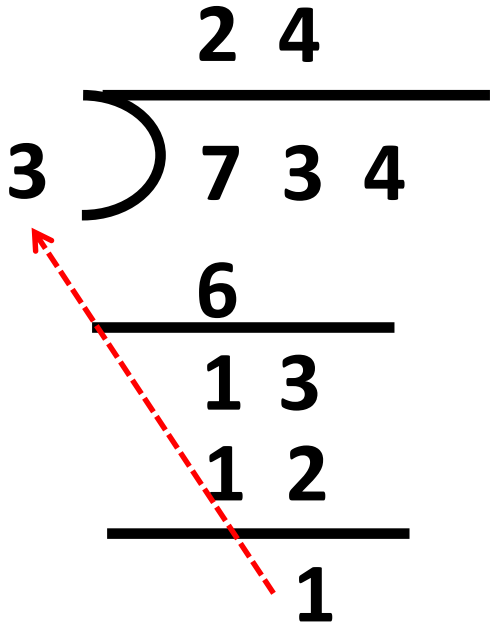
Focus on tens

Step 1 **Try quotient**

Step 2 **Multiplication**: to find out how many tens have been shared out

Step 3 **Subtraction**: to find how many tens left

Step 4 **Check**: the remainder must be less than the divisor



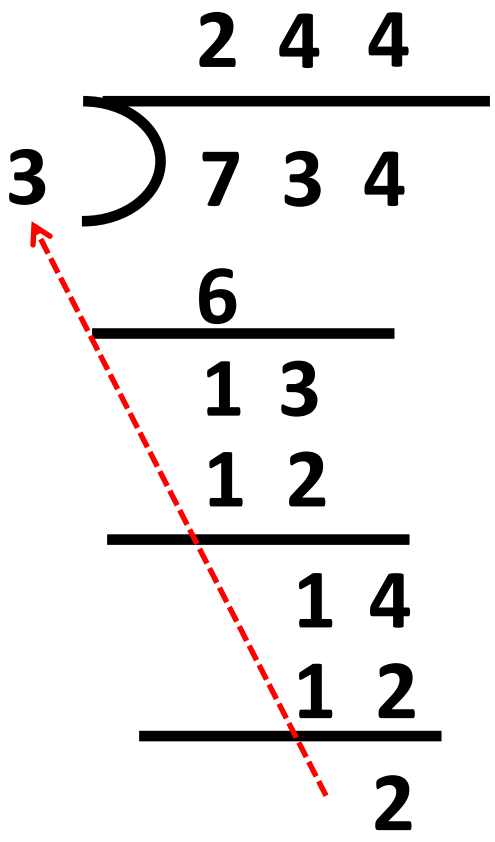
Focus on ones

Step 1 **Try quotient**

Step 2 **Multiplication**: to find out how many ones have been shared out

Step 3 **Subtraction**: to find how many ones left

Step 4 **Check**: the remainder must be less than the divisor



Step 1 Try quotient

Step 2 Multiplication

Step 3 Subtraction

Step 4 Check

Long column method

Practice:

Use the long column method to calculate

819÷7=