## Year 3 Written Methods of Calculation

ADDITION	SUBTRACTION	MULTIPLICATION	DIVISION
Written method used in addition calculations in Year 3 are outlined below.	Written method used in subtraction calculations in Year 3 are outlined below.	Written method used in multiplication calculations in Year 3 are outlined below.	Written method used in division calculations in Year 3 are outlined below.
Partitioning Method 79 + 45 = (70 + 9 + 40 + 5 =)- may be included 70 + 40 + 9 + 5 = 110 + 14 = 124 83 + 42 = 80 + 40 = 120 3 + 2 = 5 120 + 5 = 125 Moving on to Expanded Partitioning Method 48 + 36 = + $\frac{40 + 8}{70 + 14} = 84$	Complimentary Addition Using empty numberlines 84 - 56 = +4 $+20$ $+4$ $5680$ $60$ $84$ $84$ $-56 = 28Moving on toExpanded Partitioning Method87-34 =\frac{80 + 7}{-30 + 4}50 + 3$	Times TablesChildren are encouraged to use their times table facts to help them answer questions.They should know their times tables up to 12 X 10Children are also taught to multiply by 10 using zero as a place holder.Partition Method $32 \times 3 =$ $\begin{pmatrix} 30 \times 3 \\ 2 \times 3 \end{pmatrix} = 90 \begin{pmatrix} 2 \times 3 \\ 96 \end{pmatrix}$	Times TablesChildren will be encouraged to use their times table facts.• $36 \div 6 -$ How many groups of 6 are there in $36$ ? (Grouping)• $36 \div 6 -$ How many things will each of the 6 people get? (Sharing)• $38 \div 6 = 6$ with 2 remainder How many 6's (counting on) and how many left over?Partitioning the Dividend Method Early Chunking $80 \div 6$ lies between $60 \div 6 = 10$ and $120 \div 6 = 20$ Partition the dividend into multiples of the divisor. $80$ $60 + 20$ $10 + 3$ remainder 2Answer: $13 r 2$