

Year 6 Written Methods + - x ÷

Year 6 written methods build on the children's understanding of column addition and subtraction, short and long multiplication with larger numbers and decimals. As well as revising short division, we teach strategies for long division and how we write remainders as whole numbers, fractions and decimals.

Compact column addition for adding several large numbers and decimal numbers with up to 2 decimal places

Compact column addition with money

e.g. £14.64 + £28.78 + £12.26

$$\begin{array}{r}
 \text{£}14.64 \\
 + \text{£}28.78 \\
 \text{£}12.26 \\
 \hline
 \text{£}55.68
 \end{array}$$

Short multiplication of 2-, 3- and 4-digit numbers by 1-digit numbers
e.g. 3743 x 6

$$\begin{array}{r}
 3743 \\
 \times 6 \\
 \hline
 22458
 \end{array}$$

Long multiplication of 2-, 3- and 4-digit numbers by 2-digit numbers
e.g. 456 x 38

$$\begin{array}{r}
 456 \\
 \times 38 \\
 \hline
 13680 \\
 3648 \\
 \hline
 17328
 \end{array}$$

Short division of 3- and 4-digit numbers by 1-digit numbers
e.g. 139 ÷ 3

$$\begin{array}{r}
 46 \text{ r}1 \\
 3 \overline{) 139}
 \end{array}$$

Long division of 3- and 4-digit numbers by 2-digit numbers
e.g. 4176 ÷ 13

$$\begin{array}{r}
 300 + 20 + 1, \text{ r}3 \\
 13 \overline{) 4176} \\
 \underline{-3900} \\
 276 \\
 \underline{-260} \\
 16 \\
 \underline{-13} \\
 3
 \end{array}
 \quad 4176 \div 13 = 321 \text{ r}3$$

Compact column subtraction for large numbers

e.g. 34 685 - 16 458

$$\begin{array}{r}
 2 \text{ 14} \quad 7 \text{ 15} \\
 \cancel{3} \ \cancel{4} \ 6 \ \cancel{8} \ \cancel{5} \\
 - 1 \ 6 \ 4 \ 5 \ 8 \\
 \hline
 1 \ 8 \ 2 \ 2 \ 7
 \end{array}$$