

Subtraction: Violet (Y6)

Mental Work

Derive and recall

- subtraction facts for multiples of 10 to 1000 and decimal numbers with one decimal place, e.g. $650 - \Delta = 490$, $\Delta - 1.4 = 2.5$

Work mentally (with jottings if needed)

- subtract pairs of decimals with units, tenths or hundredths, e.g. $3.7 - 1.28$ (use knowledge of place value)
- subtract a decimal with units and tenths that is nearly a whole number, e.g. $6.5 - 3.8$ (partition: subtract a whole number and adjust, e.g. $6.5 - 3.8 = 6.5 - 4 + 0.2$)
- count back in minutes and hours, bridging through 60 (analogue and digital times, 12-hour and 24-hour clock)

Children should be encouraged to:

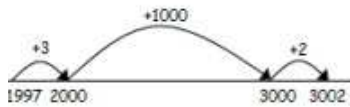
* **approximate** their answers before calculating

***consider if a mental calculation** would be appropriate **before** using written methods

***check their answers** after calculation using an appropriate strategy

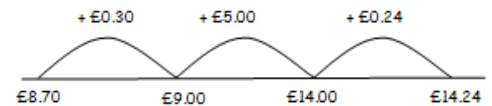
Number lines

Where the numbers involved in the calculation are close together or near to multiples of 10, 100, etc., counting **on** using a number line should be used, e.g. $3002 - 1997 = 1005$. This is much less vulnerable to errors and is much more efficient.

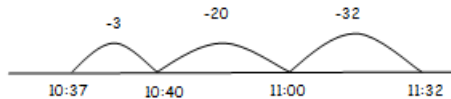


It may be easiest to find the difference (using the counting up method) using a number line

$$\pounds 14.24 - \pounds 8.70$$



The 09:55 train from Brighton takes 55 minutes to arrive in London. On Tuesday it set off late and arrived at 11:32. What time did it set off?



or



Recording

Children should use decomposition to

- find the difference between two 3-digit sums of money, with or without 'adjustment' from the pence to the pounds, and know that the decimal points line up under each other
- subtract decimal amounts using tenths and then hundredths
- Subtract two or more decimal fractions with up to three digits and either one or two decimal places, and know that decimal points should line up under each other

$$\begin{array}{r} \pounds 8.95 \\ - \pounds 4.38 \\ \hline \pounds 4.57 \end{array}$$

Alternatively, children can set amounts to whole numbers, i.e. $895 - 438$ and convert to pounds after the calculation

Missing number calculations.

$$* \square \square - 4 = \square \square$$

$$6467 - \square \square \square = 3783$$

What digit must * be?

Solve multi step problems with subtraction.

Use inverse operations and rounding to estimate and check calculations.