MATHSWATCH CLIP – N10, C22

Percentages

We expect pupils to:

Find 50%, 25%, 10% and 1% without a calculator and use addition to find Other amounts eg.

50% = $\frac{1}{2}$ = 0.5 25% = $\frac{1}{4}$ = 0.25

10% = $\frac{1}{10}$ = 0.10 1% = $\frac{1}{100}$ =0.01

Find percentages with a calculator

(E.g. 23% of £300 = 23 ÷ 100 x 300 = £69)

Recognise that "of" means multiply.

We expect pupils to:

Express a fraction as a percentage via the decimal equivalent.

WORKED EXAMPLES

- Find 36% of £250

  10% is £25

  30% is £75 (10% x 3)

  5% is £12.50 (10% ÷ 2)

  1% is £ 2.50 (10% ÷ 10)

  36% is **£90** (30% + 5% + 1% = £75 + £12.50 +£2.50)

- Express two fifths as a percentage

$$\frac{2}{5} \xrightarrow{\times 2} \frac{4}{10} \xrightarrow{\times 10} \frac{40}{100} = 40\%$$

This rule is equivalent for % profit, increase or decrease.

- Increase £350 by 15%

15% of 350 = 15 ÷ 100 x 350 = £52.50 (to find the increase)

£350 + £52.50 = <u>£402.50</u> (then add on for the new total)

WE DO NOT…

Use the % button on the calculator because of inconsistencies between models.