Numeracy Skills

Percentages – Using a calculator

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Finding a percentage of a value

- If it is a calculator question, put the percentage as a decimal first by dividing by 100 then multiply.
- Check your answer makes sense and round it if appropriate (remember that money has 2 decimal places)
- Example: Find 68% of £455

  68% ÷ 100 = 0.68

  0.68 x £455 = £309.40

Step 1: Make a decimal by dividing percentage by 100
Step 2: Multiply by the original amount.

How do you turn a test mark into a percentage?

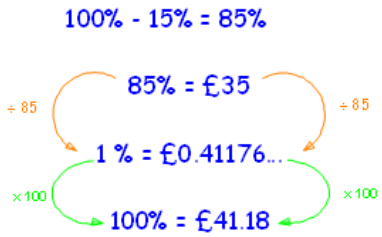
- Write your information as a fraction
- Do the numerator (top number) divided by the denominator (bottom number) to give a decimal
- Multiply by 100 to make it a percentage

Example: Kevin got 38 out of 40 on a class test.
What was his percentage?

$$\frac{38}{40} \times 100$$
$$= 38 \div 40 \times 100$$
$$= 0.95 \times 100$$
$$= 95\%$$

Reverse Percentage

- A January sale advertises 15% off its clothing. In the sale it cost £35. How much was it originally?



Percentages – Using a calculator

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Percentage increase or decrease

- Find the value change using the previous method
- If it is a decrease, then subtract from the original
  If it is an increase then add to the original

- Example:

The weight of a new born baby *decreases* by 12% in its first week. If a baby was 3.9 kg when born, what would you expect its weight to be at a week old?

Find 12% of 3.9 kg

12 ÷ 100 = 0.12

0.12 x 3.9 = 0.468 kg

Subtract 12% from original birth weight (This is a DECREASE)

3.9 kg - 0.468 kg = 3.432 kg

- If you are finding the percentage change then find the actual change and divide by the original and times by 100 to give a percentage

$$\text{Percentage Change} = \frac{\text{Change}}{\text{Original}} \times 100$$

Example: A house now costs £158 000. Last year it was bought for £150 000. Find this as a percentage change.

£158 000 - £150 000 = £8000

£8000 ÷ £150 000 x 100 = 5.3% (1 decimal place)

This topic will be covered in *MNU 2-07a, MNU 2-07b, MNU 3-07a & MNU 4-07a*