Finding a percentage and percentage change

A percentage is a fraction out of 100.

A price rises from €80 to €92. Find the percentage increase.

$92-80=12$	Find the increase.
$\frac{12}{80}\times 100=15$	Divide by the original price, then multiply by 100.

15%

Choose the right base

For percentage change, divide by the starting amount, not the final amount.

Multipliers and reverse percentages

A 20% reduction leaves 80% of the original amount.

A jacket costs €72 after a 20% discount. Find its original price.

$100\% - 20\% = 80\%$	The sale price is 80% of the original.
$0.8x = 72$	Write the percentage as a multiplier.
$x = \frac{72}{0.8} = 90$	Divide by the multiplier to undo the discount.

Original price: €90

Successive changes

Multiply the two multipliers. A 20% increase followed by a 20% decrease gives 1.2 × 0.8 = 0.96, so the overall change is a 4% decrease.

JUNIOR CYCLE HIGHER LEVEL · CHAPTER PRACTICE

Percentages

Try the questions before opening the separate answer key. Show one step per line.

5.1 · Fluency

Find 15% of €240.

5.2 · Variation

A price rises from €75 to €87. Find the percentage increase.

5.3 · Choose a method

After a 20% reduction, a bike costs €144. What was its original price?

Check your work: are the sign, units and level of accuracy appropriate?