

SUBJECT: **Portions and percentages**

KEY-WORDS: percentage, fraction, portion, division.

LINK-WORDS: Conversion, score, mark out of a hundred

<p><b>NOTES</b></p> <p>Any number can be shown as a percentage of another. The trick is to change the problem into a fraction first, and then convert that fraction into a percentage.</p> <p>To change it into a fraction – just place the variable sum over the original sum.</p> <p>To convert the fraction into a percentage, just Multiply that fraction by 100.</p> <p>Sometimes you may have to do a subtraction first if the question talks of percentage increase or decrease.</p>	<p><b>EXAMPLE</b></p> <p>What percentage of £400 is £25?</p> $\frac{25}{400} \times 100\% = 6.25\%$ <p>Aiden scored 55 out of 80 in an examination. What was his percentage score?</p> $\frac{55}{80} \times 100\% = 68.75\%$ <p>The price of a coat is increased from £35 to £40. What percentage increase is this?</p> <p>£40 - £35 = £5</p> $\begin{aligned} \text{\%age increase} &= \frac{5}{35} \times 100 \\ &= 14.29\% \end{aligned}$
<p><b>DO's</b></p> <p>Think carefully as to which is the denominator (bottom) number of the fraction and which is the numerator (top). Especially if your answer might be more than the original total.</p> <p>THINK – Does my answer make sense?</p>	<p><b>DON'Ts</b></p> <p>Don't get the fraction upside down. This is usually obvious if you consider whether or not your answer makes sense.</p> <p>Don't divide by the new price when looking at price increase or decrease – divide by the ORIGINAL price. (£35 in above example – NOT £40)</p>

<p><b>RELEVANT SUBJECTS</b></p> <p>ALL. Anywhere where you want to compare information based on a standardised percentage system.</p>	<p><b>EXAMPLES and LINKS</b></p>
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