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| **Topic/Skill**  | **Definition/Tips** | **Example****Topic: Calculating with Percentages**  |
| 1. Increase or Decrease by a Percentage | Non-calculator: **Find the percentage** and **add** or **subtract** it from the **original** amount.Calculator: Find the **percentage multiplier** and multiply. | Increase 500 by 20% (Non Calc):10% of 500 = 50so 20% of 500 = 100500 + 100 = 600Decrease 800 by 17% (Calc):100%-17%=83%83% ÷ 100 = 0.830.83 x 800 = 664 |
| 2. Percentage Multiplier | The **number** you **multiply** a quantity by to **increase or decrease** it by a **percentage**. | The multiplier for increasing by 12% is 1.12The multiplier for decreasing by 12% is 0.88The multiplier for increasing by 100% is 2. |
| 3. Reverse Percentage | Find the **correct percentage given in the question**, then work backwards to **find 100%**Look out for words like ‘**before’** or ‘**original’** | A jumper was priced at £48.60 after a 10% reduction. Find its original price.100% - 10% = 90%90% = £48.601% = £0.54100% = £54 |
| 4. Simple Interest | Interest calculated as a **percentage of the original** amount. | £1000 invested for 3 years at 10% simple interest.10% of £1000 = £100Interest = $3×£100=£300$ |

**Knowledge Organiser**