**Crack the Code**

**Mixed Percentage Problems**

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| **A** | Increase £45 by 12% | **B** | Decrease 68 by 23% |
| **C** | A clock costs £22 plus 18% tax. What is the total cost of the clock? | **D** | A jumper costs £31.35 in a ‘5% off’ sale. What was the price of the jumper before the sale? |
| **E** | If 45% is 18 cm, what is 100%? | **F** | A plant is 8 cm tall. Its height increases by 10% per week. What is its height after 6 weeks? |
| **G** | Natalka bought a laptop three years ago, which cost £200 new. Its value decreases by 15% per year. How much is it now worth? | **H** | Emma invests £100 in a bank which earns 3% compound interest per annum. How much interest did she earn over 5 years? |
| **I** | A garden bench which originally cost £50 is in a 10% sale. It then has extra 15% off the sale price. What is the new sale price? | **J** | A population of 32 bees increases by 20% per year. What is the population after 2 years? |
| **K** | A chef earns £14.31 per hour after an 8% salary increase. What was the hourly rate before the increase? | **L** | If 4% is represented by £1.23, what is 100% represented by? |
| **M** | A 10% increase, followed by another 10% increase is equivalent to what percentage increase overall? | **N** | Jasmine invests £50 in a bank account which earns 2.5% compound interest per year. How much does she have in the bank after 6 years? |
| **O** | A shirt is in a 15% sale, and its price is reduced by £7.50. What was the original price of the shirt? | **P** | Zara earns £12.96 per hour after a 10% pay cut. What was Zara’s hourly wage before the pay cut? |
| **Q** | In a sale the price of a watch is reduced to $51.80. This is a 7.5% reduction on the original price. What was the original price? | **R** | Bilal invested some money in the bank at 4% compound interest per year. After 2 years he had £243.36 in the bank. How much did Bilal invest? |
| To get the three-digit code, add all your answers together and round to the nearest integer. |