## Fill in the Blanks

 Reverse Percentages| Question | Percentage Increase/ Decrease | Multiplier | Calculation | Original Amount |
| :---: | :---: | :---: | :---: | :---: |
| After an increase of $10 \%$, the price of a computer is $£ 275$. What was its original price? | 10\% <br> Increase | 1.1 | $£ 275 \div 1.1$ | £250 |
| After an 8\% pay rise, Omar earns $£ 10.26$ per hour. What was his hourly pay before the increase? | $\begin{gathered} 8 \% \\ \text { Increase } \end{gathered}$ | 1.08 | $\begin{aligned} & £ 10.26 \\ & \div 1.08 \end{aligned}$ | $£ 9.50$ |
| A shirt is reduced by $20 \%$ to $£ 20$ in a sale. What was its original price? | $20 \%$ <br> Decrease | 0.8 | $£ 20 \div 0.8$ | £25 |
| The population of a village decreases by $16 \%$ to 1260 . What was the population before the decrease? | $16 \%$ <br> Decrease | 0.84 | $\begin{gathered} 1260 \\ \div 0.84 \end{gathered}$ | 1500 |
| A TV costs $£ 258.42$ including $18 \%$ tax. What was the price of the TV before the tax was added? | $\begin{gathered} 18 \% \\ \text { Increase } \end{gathered}$ | 1.18 | $\begin{gathered} £ 258.42 \\ \div 1.18 \end{gathered}$ | £219 |
| A painting is sold for $£ 729$, making a profit of $35 \%$. What was the original cost of the painting? | $\begin{gathered} 35 \% \\ \text { Increase } \end{gathered}$ | 1.35 | $\begin{gathered} £ 729 \\ \div 1.35 \end{gathered}$ | £540 |
| In a sale, a coat is reduced by $33 \%$ to $£ 43.55$. What was its original price of the coat? | 33\% <br> Decrease | 0.67 | $\begin{gathered} £ 43.55 \\ \div 0.67 \end{gathered}$ | £65 |
| A puppy increases in weight by $7.5 \%$ to 3.87 kg . What was the previous weight of the puppy? | 7.5\% <br> Increase | 1.075 | $\begin{gathered} 3.87 \\ \div 1.075 \end{gathered}$ | 3.6 kg |
| E.g. A mobile phone is sold for £92, making a profit of $15 \%$. How much was it bought for? | $\begin{gathered} 15 \% \\ \text { Increase } \end{gathered}$ | 1.15 | $£ 92 \div 1.15$ | £80 |
| E.g. The number of ants in a colony decreases by $12 \%$ to 528. How many ants were there originally? | $12 \%$ <br> Decrease | 0.88 | $528 \div 0.88$ | 600 |

