

## Reverse Percentages Practice



- Q1.** The value of an antique vase has increased by 4% and is now worth £1872. Work out the value of the vase before the increase.  
[2 marks]
- Q2.** In a sale, the normal price of a shirt is reduced by 30%. The sale price of the shirt is £6.30. Work out the normal price of the shirt.  
[2 marks]
- Q3.** In a supermarket, bags of sugar have been increased by 6% due to the cost of importing the product from abroad. Given that bags now cost £1.59, how much did the supermarket charge before the price increase?  
[2 marks]
- Q4.** In a sale, normal prices are reduced by 35%. If the normal price of a coat is reduced by £52.50, work out the normal price of the coat.  
[2 marks]
- Q5.** In a sale, the normal price of a microwave oven is reduced by 22%. The sale price of the microwave is £67.08.  
Work out the normal price of the oven.  
[2 marks]
- Q6.** The annual cost of a council tax bill increased by 8%. The council tax bill increased by £58. Work out the cost of the council tax bill before the increase.  
[2 marks]
- Q7.** The price of a PC workstation decreased by 7.5%. If the price of the workstation decreased by £120, find the original price.  
[2 marks]



**Q8.** One day, George is given a pay rise of 4%. Later that year, he receives another pay rise of 2%. If he now earns £2545.92 per month, work out how much his monthly salary was before the two pay increases.

[3 marks]

**Q9.** At the start of 2019, the value of Jeremy's investment was £28,000. During that year, it decreased in value by 4%. In 2020, it then increased in value by  $x\%$ . If it was worth £27,283.20 at the end of 2020, find the value of  $x$ .

[3 marks]

**Q10.** Jo's tortoise increased in weight by 1% each year since its birth. If it is now 3 years old, and weighs 4 kg, find the birth weight to the nearest gram.

[3 marks]

### Reverse Percentage, or not?

**Q11.** The population of birds on St. Michael's island is 2200. Scientists state that the population is growing by 10% each year. What will be the population next year, according to the scientists?

[2 marks]

**Q12.** A car cost £8500 when it is bought, and depreciates by 15% over the first year after purchase. How much will it be worth after 1 year?

[2 marks]

**Q13.** John's kitchen measured  $11.5 \text{ m}^2$  after he had an extension built. The area had increased by 25% after extending. What area did his kitchen cover before?

[2 marks]

**Q14.** After half-time, the number of spectators at a rugby match decreases by 9%. There were 45,000 spectators before half-time. How many remain?

[2 marks]

**Q15.** Mae buys a ring which costs £68. This cost includes VAT at a rate of 20%. How much is the watch without VAT, to the nearest penny?

[2 marks]