

Reverse Percentages

How to ...

The normal price of a television is reduced by 30% in a sale.

The sale price of the television is £350.

Work out the normal price of the television.

$$\begin{array}{l} 100\% \\ \text{ORIGINAL} \end{array} \text{ less } 30\% = 70\% \begin{array}{l} \\ \text{SALE PRICE} \end{array}$$

we are told this is \nearrow
£350

$$\text{so } 10\% = 350 \div 7 \\ = \pounds 50$$

$$\text{so if } 10\% = \pounds 50$$

$$100\% = \pounds 500$$

$$\text{The normal price of the TV} = \pounds 500 \quad (3)$$

TO CHECK 10% of $\pounds 500 = \pounds 50$
 $30\% = \pounds 150$ $500 - 150 = 350 \checkmark$

Now have a go yourself ...

- In a sale, all prices are reduced by 20%. The sale price of a shirt is £33.60. Work out the original price.
- The price of a new TV is £376, which includes VAT. What is the cost of the TV excluding VAT?
- Employees at a firm are going to receive a 4% increase in their salaries. Joe earns £24,960 after the increase. What was his original salary?
- A holiday is advertised at a price of £403. This represents a saving of 35% on the brochure price. Work out the brochure price of the holiday.
- Nimer got a pay rise of 5%. His new pay is £1680 per month. Work out his pay per month before he got this pay rise.
- In a sale prices are reduced by 20%. Andrew brought a saddle for his horse. The sale price was £220. Calculate the normal price of the saddle.
- The value of a car depreciates by 35% each year. At the end of 2007, the value of the car was £5460. Work out the value of the car at the end of 2006.

YOU MIGHT NEED TO USE A CALCULATOR FOR SOME OF THESE

Exam Questions

Chris is a plumber. He has to work out the VAT on some equipment he has just bought. VAT is 17.5%. The total cost of the equipment including VAT is £4465. Calculate how much the VAT is.

(3)

Ready to be marked ?

Checklist



Answer checked

Working out shown

Keywords



Things to remember ...



What went well ...



Teacher comment ..