

Percentage Change Practice



- Q1.** The price of a can of orange was 60p last week. This week, it costs 75p. Work out the percentage change in the price.
[2 marks]
- Q2.** A coat usually costs £320. In a sale, the same coat now costs £300. Work out the percentage change in the price to one decimal place
[2 marks]
- Q3.** In 2019, the annual cost of running a company is £25,000. In 2020, the costs were £33,000. Find the percentage increase in the cost.
[2 marks]
- Q4.** Bottles of water cost £1.20 in a supermarket. In a special offer, bottles are sold at 85p. Work out the percentage change in the price.
[2 marks]
- Q5.** Computer games cost £42 each. If the price of each game increases by £3.20, find the percentage change in the price to 1 decimal place.
[2 marks]
- Q6.** Right now, the annual cost of a council tax bill is £75. The council project that the bill will increase by £5 each year. Work out the percentage change in the cost in three years' time compared with now.
[3 marks]
- Q7.** Jeff's annual wage has increased from £35,400 to £43,700, whilst Max's salary has increased from £19,000 to £24,000. Who has had the greatest percentage change in their salary? You must show all your working.
[4 marks]
- Q8.** The price of petrol goes up from £1.20 a litre to £1.26 a litre. Work out the percentage change in the price of the fuel.
[2 marks]
- Q9.** Matt upgrades his gym membership from Silver which costs £x, to Gold which costs £15 more. Write down an expression for the percentage change.
[2 marks]



Problem Questions

Q10. At a cricket stadium, the number of occupied seats went from being $\frac{1}{2}$ full on Saturday to $\frac{5}{8}$ full on Sunday.

Work out the percentage change in the number of occupied seats.

[3 marks]

Q11. Over the course of a week, the proportion of people voting for Mr. Walker in a local election fell from $\frac{3}{4}$ to $\frac{1}{3}$.

Work out the percentage change in the number of people voting for him.

[3 marks]

Q12. Paul's dog weighed 3 kg at the start of 2011. Since then, it has increased in weight by the same amount each year. If it weighed 8.4 kg at the start of 2020, find the annual percentage change in the dog's weight.

[3 marks]

Q13. Yesterday, Tina made a cake in the shape of a square having side length 8 cm. Today, she makes another cake in the shape of a square, this time having side length 5 cm. Work out percentage change in the area of the cake since yesterday, to the nearest whole number.

[3 marks]

Q14. A model aeroplane weighs 2.1 kg. Abbie decides to reduce the weight of the plane by 230 g to improve its flight. Work out the percentage change in the weight of the plane, giving your answer to 1 decimal place.

[2 marks]

Q15. Mike's pocket money has increased from £12 to £14 a week. He decides to work out the percentage change. His working is as follows:

$$\begin{aligned}\pounds 14 - \pounds 12 &= \pounds 2 \\ \frac{2}{14} \times 100 &= 14.3\%\end{aligned}$$

Do you agree? You must fully explain your reasoning.

[1 mark]