Past Papers Worksheet P4 Percentages IGCSE Mathematics 0580

(discount, profit , loss, percentage increase or decrease, reverse percentages)

1. Work out 85 cents as a percentage of $2.03 . [1]
   0580/22/M/J/17 Q5)

2. The Muller family are on holiday in New Zealand and have brought $1962 to spend.
   The family spend 15% of their dollars on a tour.
   Calculate the number of dollars they have left.[2]
   0580/42/O/N/18 Q1)(a)(ii)

3. The number of passengers on a train increases from 63 to 77. Calculate the percentage increase [3]
   0580/22/F/M/19 Q11)

4. In a sale, the cost of a coat is reduced from $85 to $67.50 . Calculate the percentage reduction in the cost of the coat [3]
   0580/23/M/J/15 Q10)

5. At the beginning of July, Kim had a mass of 63 kg. At the end of July, his mass was 61 kg.
   Calculate the percentage loss in Kim's mass. [3]
   0580/22/M/J/14 Q9)

Fundoo Tutor offers personalized coaching for IGCSE, IB, and SAT students. Need a tutor? http://fundootutor.com/book-a-call/

6. One copy of the magazine costs $4.90 . An annual subscription costs $48.80 for 13 copies.
   Calculate the percentage discount by having an annual subscription.
   0580/43/O/N/13 Q1(a)(iii)

7. During a marathon race an athlete loses 2 % of his mass.
   At the end of the race his mass is 67.13 kg.
   Calculate his mass before the race. [3]
   0580/23/O/N/11 Q13)

8. Adil and Brian are paid the same wage. Adil is given a 7% pay decrease and his new wage is $427.80 .
   Brian is given a 7% pay increase. Work out Brian's new wage. [3]
   0580/23/O/N/20 Q17)

9. One year, sales increased by 15%.
   The following year sales increased by 18%.
   Calculate the overall percentage increase in sales. [3]
   0580/42/F/M/22 Q1(e)

Fundoo Tutor offers personalized coaching for IGCSE, IB, and SAT students. Need a tutor? http://fundootutor.com/book-a-call/

10. Feri invests some money.
    The rate of interest for the first year is 2.5%.
    At the end of the second year the overall percentage increase of Feri's investment is 6.6%.
    Find the rate of interest for the second year [2]
    0580/41/M/J/22 Q2(c)

11. Fred buys a house. At the end of the first year, the value of the house increases by 5%.
    At the end of the second year, the value of the house increases by 3% of its value at the end of the first year. The value of Fred's house at the end of the second year is $60564.
    Calculate how much Fred paid for the house.
    0580/42/F/M/23 Q1(c)

12. A company employed 300 workers when it started and now employs 852 workers.
    (a) Calculate the percentage increase in the number of workers. [2]
    (b) In one month, the company sells 3000 headphones. Of these, 48% are exported, 3/8 are sold to shops and the rest are sold online. Calculate the number of headphones that are sold online. [3]
    (c) One year, sales increased by 15%. The following year sales increased by 18%. Calculate the overall percentage increase in sales. [3]
    0580/42/F/M/22 Q1)

Fundoo Tutor offers personalized coaching for IGCSE, IB, and SAT students. Need a tutor? http://fundootutor.com/book-a-call/

13. Children go to camp on holiday.

(a) Fatima buys bananas and apples for the camp.

(i) Bananas cost $0.85 per kilogram.

Fatima buys 20kg of bananas and receives a discount of 14%.

How much does she spend on bananas? [3]

(ii) Fatima spends $16.40 on apples after a discount of 18%.

Calculate the original price of the apples. [3]

0580/42/O/N/11 (a)

14. Chai invests some money. By the end of the first year, the value of the investment has decreased by 35%. By the end of the second year, the value of the investment has increased by 40% of its value at the end of the first year. Find the overall percentage change in the value of the investment. [3]

0580/21/O/N/21 Q12)

15. In January 2020, the population of a town was 5% more than its population in January 2018.

In January 2021, the population of this town was 2% less than its population in January 2020.

Calculate the overall percentage increase in the population from January 2018 to January 2021. [2]

0580/43/M/J/21 Q1(c)

Fundoo Tutor offers personalized coaching for IGCSE, IB, and SAT students. Need a tutor? http://fundootutor.com/book-a-call/

16. After one year, the value of Annie's car had reduced by 20%.
    At the end of the second year, the value of Annie's car had reduced by a further 15% of its value at the end of the first year.
    (i) Calculate the overall percentage reduction after the two years. [2]
    (ii) After three years the overall percentage reduction in the value of Annie's car is 40.84%.
    Calculate the percentage reduction in the third year. [2]
    0580/42/M/J/17 Q1

17. In a sale, the football club shop reduced the price of the football shirts to $23.80 .
    An error was made when working out this sale price.
    The price was reduced by 30% instead of 20%.
    Calculate the correct sale price for the football shirt. [5]
    0580/43/M/J/16 Q1)(c)

18. (a)In 2008, Hansi earned $7800.
    (i) He earned 15% more in 2009.
    Calculate how much he earned in 2009. [2]
    (ii) In 2010, he earns 10% more than in 2009.
    Calculate the percentage increase in his earnings from 2008 to 2010. [3]
    (b)Megan earned $9720 in 2009. This was 20% more than she earned in 2008.
    How much did she earn in 2008? [3]
    0580/42/O/N/10 1)(b)

Fundoo Tutor offers personalized coaching for IGCSE, IB, and SAT students. Need a tutor? http://fundootutor.com/book-a-call/

19. In a car magazine, 25% of the pages are used for selling second-hand cars, $62\frac{1}{2}$ % of the remaining pages are used for features, and the other 36 pages are used for reviews.
Work out the total number of pages in the magazine [4]
0580/43/O/N/13 Q1(b)

20. The price of a car is $8760.
Bryan pays a deposit of 25% of this price and then 24 equal monthly payments.
After 24 months, he will have paid a total of $9948.
Calculate the cost of one monthly payment. [3]
0580/43/O/N/16 Q7)(c)
[Answers on next page]

Fundoo Tutor
Focused. On You.

Answers

Q1) 41.9%	Q8) 492.2	Q15) 2.9
Q2) 1667.7	Q9) 35.7	Q16) (d)(i) 32 (d)(ii) 13
Q3) 22.2	Q10) 4	Q17) 27.2
Q4) 20.6	Q11) 56000	Q18) (i) 8970 (ii) 26.5 % (c) 8100
Q5) 3.17	Q12) (a)184 (b)435 (c) 435	Q19) 128
Q6) 23.4	Q13) (i) 14.62 (ii) 20	Q20) 323.25
Q7) 68.5	Q14) [-]9	

Fundoo Tutor
Focused. On You.