



Percentages

Question Paper 8

Level	IGCSE
Subject	Maths (0580)
Exam Board	Cambridge International Examinations (CIE)
Paper Type	Extended
Topic	Number
Sub-Topic	Percentages
Booklet	Question Paper 8

Time Allowed: 56 minutes

Score: /46

Percentage: /100

Grade Boundaries:

A*	A	B	C	D	E	U
>85%	75%	60%	45%	35%	25%	<25%

- 1 (a) Abdullah and Jasmine bought a car for \$9000.
Abdullah paid 45% of the \$9000 and Jasmine paid the rest.

(i) How much did Jasmine pay towards the cost of the car?

Answer(a)(i) \$ [2]

(ii) Write down the ratio of the payments Abdullah : Jasmine in its simplest form.

Answer(a)(ii) : [1]

- (b) Last year it cost \$2256 to run the car.
Abdullah, Jasmine and their son Henri share this cost in the ratio 8 : 3 : 1.
Calculate the amount each paid to run the car.

Answer(b) Abdullah \$

Jasmine \$

Henri \$ [3]

- (c) A new truck costs \$15 000 and loses 23% of its value **each year**.
Calculate the value of the truck after three years.

Answer(c)(i) \$ [3]

(ii) Calculate the overall percentage loss of the truck's value after three years.

Answer(c)(ii) % [3]

2 Chris goes to a shop to buy meat, vegetables and fruit.

(a) The costs of the meat, vegetables and fruit are in the ratio

$$\text{meat} : \text{vegetables} : \text{fruit} = 2 : 2 : 3.$$

The cost of the meat is \$2.40.

Calculate the **total** cost of the meat, vegetables and fruit.

Answer(a)(i) \$ [2]

(ii) Chris pays with a \$20 note.

What percentage of the \$20 has he spent?

Answer(a)(ii) % [2]

(b) The masses of the meat, vegetables and fruit are in the ratio

$$\text{meat} : \text{vegetables} : \text{fruit} = 1 : 8 : 3.$$

The total mass is 9 kg.

Calculate the mass of the vegetables.

Answer(b) kg [2]

(c) Calculate the cost per kilogram of the fruit.

Answer(c) \$ [3]

(d) The cost of the meat, \$2.40, is an increase of 25% on the cost the previous week.

Calculate the cost of the meat the previous week.

Answer(d) \$ [2]

3 Hassan sells fruit and vegetables at the market.

- (a) The mass of fruit and vegetables he sells is in the ratio
fruit : vegetables = 5 : 7.
Hassan sells 1.33 **tonnes** of vegetables.
How many **kilograms** of fruit does he sell? [3]
- (b) The amount of money Hassan receives from selling fruit and vegetables is in the ratio
fruit : vegetables = 9 : 8.
Hassan receives a **total** of \$765 from selling fruit and vegetables.
Calculate how much Hassan receives from selling fruit. [2]
- (c) Calculate the average price of Hassan's fruit, in dollars per kilogram. [2]
- (d) Hassan sells oranges for \$0.35 per kilogram.
He reduces this price by 40%.
Calculate the new price per kilogram. [2]
- (ii) The price of \$0.35 per kilogram of oranges is an increase of 25% on the previous day's price.
Calculate the previous day's price. [2]

4 Tickets for the theatre cost either \$10 or \$16.

(a) Calculate the total cost of 197 tickets at \$10 each and 95 tickets at \$16 each. [1]

(b) On Monday, 157 tickets at \$10 and n tickets at \$16 were sold. The total cost was \$4018. Calculate the value of n . [2]

(c) On Tuesday, 319 tickets were sold altogether. The total cost was \$3784. Using x for the number of \$10 tickets sold and y for the number of \$16 tickets sold, write down two equations in x and y .

Solve your equations to find the number of \$10 tickets and the number of \$16 tickets sold. [5]

(d) On Wednesday, the cost of a \$16 ticket was reduced by 15%. Calculate this new reduced cost. [2]

(e) The \$10 ticket costs 25% more than it did last year. Calculate the cost last year. [2]