

Finance Problems

Question Paper 5

Level	IGCSE
Subject	Maths (0580)
Exam Board	Cambridge International Examinations (CIE)
Paper Type	Extended
Topic	Number
Sub-Topic	Finance Problems
Booklet	Question Paper 5

Time Allowed: 53 minutes

Score: /44

Percentage: /100

Grade Boundaries:

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

1 Mr Chan flies from London to Los Angeles, a distance of 8800 km.
The flight takes 11 hours and 10 minutes.

- (a) (i) His plane leaves London at 09 35 local time.
The local time in Los Angeles is 8 hours behind the time in London.

Calculate the local time when the plane arrives in Los Angeles.

..... [2]

- (ii) Work out the average speed of the plane in km/h.

..... km/h [2]

(b) There are three types of tickets, economy, business and first class.
The price of these tickets is in the ratio economy : business : first class = 2 : 5 : 9.

- (i) The price of a business ticket is \$2350.

Calculate the price of a first class ticket.

\$..... [2]

- (ii) Work out the price of an economy ticket as a percentage of the price of a first class ticket.

.....% [1]

(c) The price of a business ticket for the same journey with another airline is \$2240.

- (i) The price of a first class ticket is 70% more than a business ticket.

Calculate the price of this first class ticket.

\$..... [2]

- (ii) The price of a business ticket is 180% **more** than an economy ticket.

Calculate the price of this economy ticket.

\$..... [3]

- (d) Mr Chan hires a car in Los Angeles.
The charges are shown below.

<p><u>Car Hire</u></p> <p>\$28.00 per day plus \$6.50 per day insurance.</p> <p>\$1.25 for every kilometre travelled after the first 800 km. The first 800 km are included in the price.</p>

Mr Chan hired the car for 12 days and paid \$826.50 .

- (i) Find the number of kilometres Mr Chan travelled in this car.

..... km [4]

- (ii) The car used fuel at an average rate of 1 litre for every 10 km travelled.
Fuel costs \$1.30 per litre.

Calculate the cost of the fuel used by the car during the 12 days.

\$..... [2]

2 A football club sells tickets at different prices dependent on age group.

(a) (i) At one game, the club sold tickets in the ratio

$$\text{under 18} : \text{18 to 60} : \text{over 60} = 2 : 7 : 3.$$

There were 6100 tickets sold for people aged under 18.

Calculate the **total** number of tickets sold for the game.

..... [3]

(ii) Calculate the percentage of tickets sold for people aged under 18.

.....% [1]

(b) The table shows the football ticket prices for the different age groups.

Age	Price
Under 18	\$15
18 to 60	\$35
Over 60	\$18

At a **different** game there were 42 600 tickets sold.

- 14% were sold to people aged under 18
- $\frac{2}{3}$ of the tickets were sold to people aged 18 to 60
- The remainder were sold to people aged over 60

Calculate the total amount the football club receives from ticket sales for this game.

\$ [5]

- (c) 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]

- 3 (a) Last year a golf club charged \$1650 for a family membership.
This year the cost increased by 12%.

Calculate the cost of a family membership this year.

Answer(a) \$ [2]

- (b) The golf club runs a competition.
The total prize money is shared in the ratio 1st prize : 2nd prize = 9 : 5.
The 1st prize is \$500 more than the 2nd prize.

- (i) Calculate the total prize money for the competition.

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

- (ii) What percentage of the total prize money is given as the 1st prize?

Answer(b)(ii)% [1]

- (c) For the members of the golf club the ratio men : children = 11 : 2.
The ratio women : children = 10 : 3.

- (i) Find the ratio men : women.

Answer(c)(i) : [2]

- (ii) The golf club has 24 members who are children.

Find the total number of members.

Answer(c)(ii) [3]

- (d) The club shop sold a box of golf balls for \$20.40 .
The shop made a profit of 20% on the cost price.

Calculate the cost price of the golf balls.

Answer(d) \$ [3]