Finance Problems

Question Paper 1

Level	IGCSE
Subject	Maths (0580)
Exam Board	Cambridge International Examinations (CIE)
Paper Type	Extended
Topic	Number
Sub-Topic	Finance Problems
Booklet	Question Paper 1

Time Allowed: **58 minutes**

Score: **/48**

Percentage: **/100**

Grade Boundaries:

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

1 Aasha, Biren and Cemal share \$640 in the ratio 8 : 15 : 9.

(a) Show that Aasha receives \$160.

[1]

(b) Calculate the amount that Biren and Cemal receive.

Biren \$ .....

Cemal \$ ..... [2]

(c) Aasha uses her \$160 to buy some books.
Each book costs \$15.25 .

Find the greatest number of books that she can buy.

..... [2]

(d) Biren spends $\frac{3}{8}$ of his share on clothes and $\frac{1}{3}$ of his share on a computer.

Find the fraction of his share that he has left.
Write your fraction in its lowest terms.

..... [3]

2 **(a)** Meena sells her car for \$6000.
This is a loss of 4% on the price she paid.

Calculate the price Meena paid for the car.

\$ ..... [3]

(b) Eisha changes some euros (€) into dollars (\$) when the exchange rate is €1 = \$1.351 .
She receives \$6000.

Calculate how many euros Eisha changes.
Give your answer correct to the nearest euro.

€ ..... [3]

(c) Meena and Eisha both invest their \$6000.
Meena invests her \$6000 at a rate of 1.5% per year compound interest.
Eisha invests her \$6000 in a bank that pays simple interest.
After 8 years, their investments are worth the same amount.

Calculate the rate of simple interest per year that Eisha received.

..... % [5]

3 Georg invests $5000 for 14 years at a rate of 2% per year compound interest.

Calculate the interest he receives.
Give your answer correct to the nearest dollar.

Answer $ ..... [4]

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.

Answer ..... % [3]

5 (a) The total surface area of a cone is given by the formula $A = \pi rl + \pi r^2$.

(i) Find A when $r = 6.2$ cm and $l = 10.8$ cm.

Answer(a)(i) ..... cm^2 [2]

(ii) Rearrange the formula to make l the subject.

Answer(a)(ii) $l =$ ..... [2]

(b) (i) Irina walks 10 km at 4 km/h and then a further 8 km at 5 km/h.

Calculate Irina's average speed for the whole journey.

Answer(b)(i) ..... km/h [3]

(ii) Dariella walks x km at 5 km/h and then runs $(x + 4)$ km at 10 km/h.
The average speed of this journey is 7 km/h.

Find the value of x.
Show all your working.

Answer(b)(ii) $x =$ ..... [5]

(c) **(i)** Priyantha sells her model car for \$19.80 at a profit of 20%.

Calculate the original price of the model car.

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

(ii) Dev sells his model car for \$$x$ at a profit of y%.

Find an expression, in terms of x and y, for the original price of this model car.
Write your answer as a single fraction.

Answer(c)(ii) \$..... [3]

6 Hazel invests $1800 for 7 years at a rate of 1.5% per year compound interest.

Calculate how much interest she will receive after the 7 years.
Give your answer correct to the nearest dollar.

Answer $..... [4]