Finance Problems

Question Paper 3

Level	IGCSE
Subject	Maths (0580)
Exam Board	Cambridge International Examinations (CIE)
Paper Type	Extended
Topic	Number
Sub-Topic	Finance Problems
Booklet	Question Paper 3

Time Allowed: 65 minutes

Score: /54

Percentage: /100

Grade Boundaries:

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

1

(a) Ali and Ben receive a sum of money.
They share it in the ratio 5 : 1.
Ali receives $2345.

Calculate the total amount.

Answer(a) $ .... [2]

(b) Ali uses 11% of his $2345 to buy a television.

Calculate the cost of the television.

Answer(b) $ .... [2]

(c) A different television costs $330.

(i) Ben buys one in a sale when this cost is reduced by 15%.

How much does Ben pay?

Answer(c)(i) $ .... [2]

(ii) $330 is 12% less than the cost last year.

Calculate the cost last year.

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

(d) Ali invests $1500 of his share in a bank account.
The account pays compound interest at a rate of 2.3% per year.

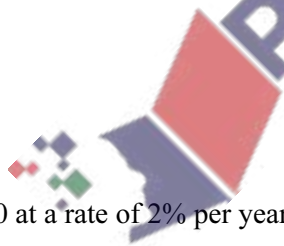Calculate the total amount in the account at the end of 3 years.

Answer(d) $ .... [3]

(e) Ali also buys a computer for $325.
He later sells this computer for $250.

Calculate Ali's percentage loss.

Answer(e) .... % [3]

2   Samantha invests $600 at a rate of 2% per year simple interest. Calculate the interest Samantha earns in 8 years.

Answer $ .... [2]
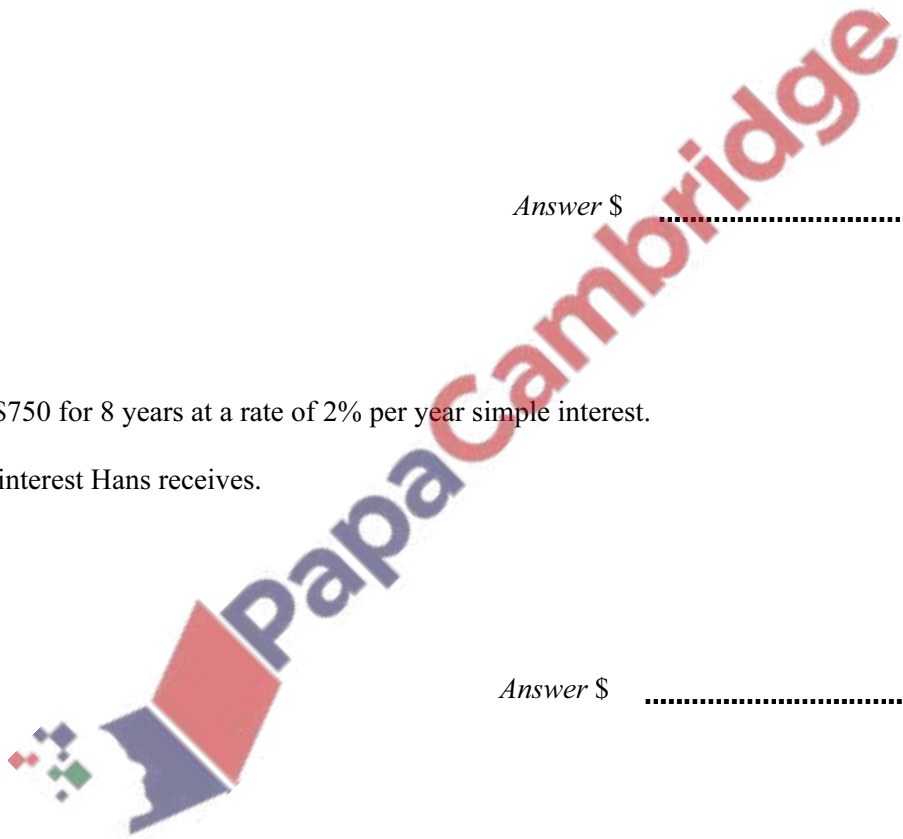
3   Shania invests \$750 at a rate of $2\frac{1}{2}$ % per year simple interest.

Calculate the **total** amount Shania has after 5 years.

Answer \$ .... [3]

4   Hans invests \$750 for 8 years at a rate of 2% per year simple interest.

Calculate the interest Hans receives.

Answer \$ .... [2]

5   Anna, Bobby and Carl receive a sum of money.
    They share it in the ratio $12 : 7 : 8$.
    Anna receives $504.

    (a) Calculate the **total** amount.

    Answer(a) $ .... [3]

    (b) (i) Anna uses 7% of her $504 to pay a bill.
    Calculate how much she has left.

    Answer(b)(i) $ .... [3]

    (ii) She buys a coat in a sale for $64.68.
    This was 23% less than the original price.
    Calculate the original price of the coat.

    Answer(b)(ii) $ .... [3]

    (c) Bobby uses $250 of his share to open a bank account.
    This account pays compound interest at a rate of 1.6% per year.
    Calculate the amount in the bank account after 3 years.
    Give your answer correct to 2 decimal places.

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

    (d) Carl buys a computer for $288 and sells it for $324.
    Calculate his percentage profit.

    Answer(d) .... % [3]

6   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?

Answer(a)(i) $ .... [3]

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

Calculate the original price of the apples.

Answer(a)(ii) $ .... [3]

(iii) The ratio   number of bananas : number of apples = 4 : 5.

There are 108 bananas.

Calculate the number of apples.

Answer(a)(iii) .... [2]

(b) The cost to hire a tent consists of two parts.

$$\boxed{\$c} \quad + \quad \boxed{\$d \text{ per day}}$$

The total cost for 4 days is \$27.10 and for 7 days is \$34.30.

Write down two equations in c and d and solve them.

Answer(b) $c=$ ....

$d =$ .... [4]

(c) The children travel 270 km to the camp, leaving at 07 43 and arriving at 15 13.

Calculate their average speed in km/h.

Answer(c) .... km/h [3]

(d) Two years ago \$540 was put in a savings account to pay for the holiday.

The account paid **compound** interest at a rate of 6% per year.

How much is in the account now?

Answer(d) \$ .... [2]