Name:

Section:

Personal and Business Finance Worksheet

1 **(a)** Imran is paid \$16 per hour.

    (i) One week he works 35 hours.

        Calculate the amount he is paid for the week.

Answer \$.................................... [1]

    (ii) Imran is paid 20% extra per hour for working at weekends.

        Work out the total amount Imran is paid for working 4 hours at the weekend.

Answer \$.................................... [2]

(b) The exchange rate between pounds and dollars is £1 = \$1.80.
Anna converts \$270 into pounds.

Calculate the number of pounds Anna receives.

Answer £.................................... [2]

2 **(a)** **(i)**

> Exchange rate
> £1 = $2.06
> £1 = 72 rupees

Manraj changes 25 200 rupees into dollars ($).

Calculate how many dollars he receives.

Answer $ .... [2]

(ii) Misja changes 380 euros into dollars ($).
He receives $551.

How many dollars does he receive for each euro?

Answer 1 euro = $ .... [1]

(b)

Account	Simple interest per year
Super Saver	3.4%
Extra Saver	3.5%

On 31 March 2011, Lydia and Simone each had $8000 in an account.
Lydia's money is in a Super Saver Account. Simone's money is in an Extra Saver Account.

(i) How much money did Lydia have in her account on 31 March 2012 after the interest had been added?

Answer $...[2]

(ii) On 31 March 2012, Lydia transferred this money to an Extra Saver Account.
How much money did she have in this account on 31 March 2013 after the interest had been added?

Answer $...[1]

(iii) Simone kept her money for the two years in the Extra Saver Account, which earned simple interest of 3.5% per year.
After all interest had been added, who had more money in their account on 31 March 2013 and by how much?

Answer .... had $ .... more [2]

3 (a) (i) The cost price of bicycle A is $620.
The shopkeeper sells it and makes a profit of 45%.

Calculate the selling price.

Answer $... [1]

(ii) In a sale, the price of bicycle B is reduced from $2400 to $1596.

Calculate the percentage reduction given.

Answer ....% [2]

(iii) Tax on the original price of bicycle C is charged at 20% of the original price.
After tax has been included, Matthew pays $1080 for this bicycle.

Calculate the original price.

Answer $... [2]

(b) Ada invests $600 in an account that earns simple interest.
At the end of 3 years, the investment is worth $681.

Calculate the rate of simple interest per year.

Answer ....% [3]

4 (a) Dwayne buys a camera for $90.
He sells the camera for $126.

Calculate his percentage profit.

Answer ....% [1]

(b) The price of a computer was $375.
In a sale, the price was reduced by 15%.

Calculate the reduction in the price of the computer.

Answer $ .... [1]

(c) The exchange rate between euros and dollars is €1 = $1.25 .

(i) Convert €180 to dollars.

Answer $ .... [1]

(ii) Convert $500 to euros.

Answer € .... [1]

5 **(a)** Mariam works in a shop.
She earns $5.20 per hour.
She also earns a bonus of 15% of the value of the items she sells in a week.

   (i) In one week she works for 32 hours and sells items with a value of £2450.

   Calculate Mariam's total earnings for the week.

   Answer $ .... [2]

   (ii) In another week, Mariam worked for 28 hours and earned a total of $409.60 .

   Calculate the value of the items she sold that week.

   Answer $ .... [3]

(b) **(i)** Jack opens a bank account paying simple interest.
He pays in $800 and leaves it in the account for 4 years.
At the end of 4 years he closes the account and receives $920.

   Calculate the percentage rate of simple interest paid per year.

   Answer ....% [2]

6 **(a)** In 2013, Mary worked for Company A.
Her salary for the year was $18 750.

   (i) $5625 of her salary was not taxed.

   What percentage of her salary was not taxed?

   Answer .... % [2]

(ii) The remaining $13 125 of Mary's salary was taxed.
22% of this amount was deducted for tax.
Mary's take-home pay was the amount remaining from $18 750 after tax had been deducted.
She received this in 52 equal amounts as a weekly wage.

Calculate Mary's weekly wage.

Answer $ .... [3]

(iii) In 2012 Mary had worked for Company B.
When she moved from Company B to Company A, her salary increased by 25% to $18 750.

Calculate her salary when she worked for Company B.

Answer $ .... [2]

7 **(a)** Luis works in an office.
For normal time he is paid $8 per hour.
For overtime he is paid the same rate as normal time plus an extra 50%.
One month he works 140 hours normal time and 10 hours overtime.

Work out how much he is paid for that month's work.

Answer $ .... [2]

(b) Sara invests $240 in an account that pays 3% per year simple interest.
She leaves the money in the account for 5 years.

Work out how much money Sara has at the end of 5 years.

Answer $ .... [2]

(c) Kristianne buys a fridge and a freezer in a sale.
The sale offers 15% off everything and she pays a total of $357.
Before the sale, the freezer cost $250.

What was the cost of the fridge before the sale?

Answer $ .... [3]

8 (a) A trader buys 7 items for $4.10 each and 5 items for $6.40 each.
He sells all of them for $10 each.

Calculate his profit.

Answer $ .... [1]

(b) Find the simple interest on $450 for 5 years at 4% per annum.

Answer $ .... [1]

9 (a) Fatima and Mohammed buy new bikes.

(i) Fatima buys a city bike costing $360.
She pays 60% of the cost then pays $15 per month for 12 months.

(a) How much does Fatima pay altogether?

Answer $.................................... [2]

(b) Express this amount as a percentage of the original cost.

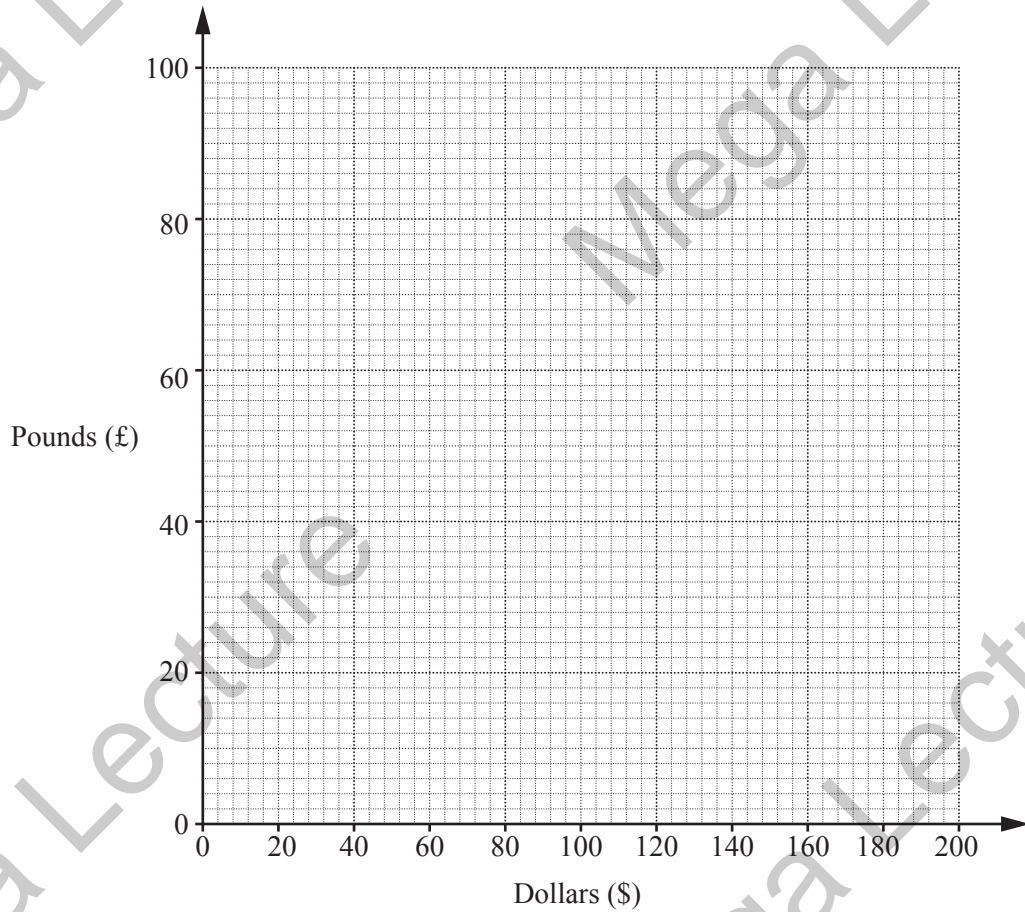*Answer* .... % [1]

(ii) Mohammed pays \$569.80 for a mountain bike in a sale.
The original price had been reduced by 26%.

Calculate the original price of the mountain bike.

Answer \$.. [2]

10 It is given that 100 dollars ($) is equivalent to 56 pounds (£).

(a) Use this information to draw a conversion graph between pounds and dollars on the grid below.

[1]

(b) Use your graph to convert $64 to pounds.

Answer £ .... [1]

11 (a) Each year the Reds play the Blues in a baseball match.
In 2014, there were 40 500 tickets sold for the match.
In 2015, the number of tickets sold was 2.4% more than in 2014.

Calculate the number of tickets sold for the match in 2015.

Answer .... [1]

(b) In 2015, the cost per ticket for the match was $68.25.
The cost per ticket for the match increased by 5% from 2014 to 2015.

Calculate the cost per ticket for the match in 2014.

Answer $ .... [2]

(c) Calculate the percentage increase, from 2014 to 2015, in the total money taken for the match.

Answer ....% [3]

12 The basic price of the 2016 model of a car is $21 000.
Sayeed and Rasheed each buy this model of car.

(a) (i) Sayeed pays a deposit of $756.

Calculate the deposit Sayeed pays as a percentage of the basic price.

Answer .... % [1]

(ii) He then pays 24 monthly payments of $922.25 .

Calculate the **total** amount that Sayeed pays as a percentage of the basic price.

Answer .... % [2]

(b) Rasheed pays a deposit of $381 followed by 36 equal monthly payments.
The **total** amount that he pays is 127% of the basic price of $21 000.

Calculate Rasheed's monthly payment.

Answer $ .... [3]

(c) $21\,000 represented an increase of 5% on the basic price of the 2015 model.

Calculate the difference between the basic prices of the 2015 and 2016 models.

Answer $ .... [3]

13 (a) Rani has $240.

She spends $\frac{5}{8}$ of this on a new phone.

Work out the cost of the phone.

Answer $ .... [1]

(b) Anna invests $150 in an account that pays simple interest.
She leaves the money in the account for 4 years.
At the end of 4 years she has $162.

Work out the rate of simple interest paid per year.

Answer ....% [2]

14 (a)

FLIGHTS TO SYDNEY

Cost per person: $1199

ACCOMMODATION

Cost per adult per night: $55

Cost per child per night: $40

INSURANCE COVER FOR UP TO 20 DAYS

Cost per adult: $40   and   Cost per child: $30

OR

Cost for family (2 adults and up to 4 children): $155

A family of 2 adults and 3 children travel to Sydney for a holiday lasting 14 nights.

Calculate the **lowest total cost** of the flight, accommodation and insurance for their holiday.

Answer $ .... [3]

(b)

BONUS CARS

$42 per day for any mileage

VALUE CARS

$20 per day   **and** $0.50 per mile

The family hires a car for 14 days and estimates their total mileage will be 750 miles.

Which company charges less for this hire and by how much?

Answer .... by $ ....[3]

15 (a) Find 110% of 70.

(b) When new, a car was worth $15 000.
After one year it was worth $12 000.

Calculate the percentage reduction in its value.

16 (a) Sara buys a new car.
The cash price of the car is $4500.
She can pay for the car using option A or option B.

Option A	**Option B**
Pay $\frac{1}{5}$ of the cash price then 12 monthly payments of $340	Pay 12% of the cash price then 24 monthly payments of $195

Which option is cheaper and by how much?

(b) Sara's car uses 5.2 litres of petrol for each 100 km she drives.
Petrol costs $0.85 per litre.
Sara drives 240 km.

Calculate the cost of the petrol used for this journey.
Give your answer correct to the nearest cent.

Answer $ .... [3]

(c) Sara pays a total of $322 for her car insurance.
This total is made up of a basic charge plus 15% sales tax.

Calculate the amount of sales tax that Sara pays.

Answer $ .... [3]

17 (a) Cecil bought a camera for $120.
After two years he sold it for $90.

Calculate the percentage loss.

Answer .... % [1]

18 (a) Kamal earned a total of $32 500 in 2017.
He paid 9% of this amount into his pension.
He paid 22% tax on the remainder of his earnings.

Calculate the amount left after paying his pension and his tax.

$ .... [3]

(b) Kamal invested $1200 in a savings account paying 1.8% per year compound interest.
He left the money in the account for 5 years.

Calculate the amount of money in the account at the end of 5 years.
Give your answer correct to the nearest cent.

$ .... [3]

(c) Kamal also invested some money in a different savings account for 5 years.
This account paid 2.1% per year **simple** interest.
At the end of 5 years there was $828.75 in the account.

Calculate the amount of money he invested in this account.

$ .... [3]

19 (a) Daniel earns $760 each month.
He pays 15% of his earnings in tax.

Calculate the amount of money Daniel has each month after paying tax.

.... [2]

(b) Daniel invests $1200 in a savings account.
The account pays simple interest at a rate of 2% per year.

Calculate the amount of money in the account after 6 years.

.... [2]

20 Tanya owns a small business.

(a) Tanya has 4 employees.
Every week, the employees each work for $7\frac{3}{4}$ hours each day for 5 days.
Each employee is paid $15.20 per hour.

Calculate the total amount Tanya pays her 4 employees in one week.

.... [2]

(b) The business made a profit of $25 700 in 2017 compared with $22 102 in 2018.

Calculate the percentage decrease in profit from 2017 to 2018.

.... % [2]

(c) Tanya must add 8% sales tax to the initial cost of a job.
She then adds 15% to the cost, including sales tax, to find the amount to charge a client.
Tanya charges one client a total of $465.75 for a job.

Calculate the initial cost of this job.

.... [3]

(d) Tanya invests $8500 in an account paying 3.1% per year compound interest.
At the end of 5 years she takes $9300 from the account to buy new equipment for the business.

Calculate how much money is left in the account after buying the new equipment.

.... [3]

21 (a) Stefan had an annual income of $21 500 in 2018.
His annual income increased to $22 790 in 2019.

Calculate the percentage increase.

.... % [2]

(b) Stefan invests $1260 in a bank.
The bank pays simple interest at a rate of 2.5% per year.

Calculate the amount Stefan has in the bank at the end of 3 years.

.... [2]

22 Sandra buys a vase for $40 and sells it for $200.

Calculate her percentage profit.

.... % [2]

23 (a) The cash price of a car is $13 000.
Marta pays in instalments for this car.

Marta pays a deposit of 15% of the cash price.
She then pays 24 monthly instalments of $500.

Calculate the total amount Marta pays for the car.

$ .... [3]

(b) The price of a phone is reduced by 12% in a sale.
The sale price of the phone is $286.

Calculate the price of the phone before the sale.

$ .... [2]

(c) Samuel invests $1500 in an account paying 1.9% per year compound interest.
Nina invests $1500 in an account paying 1.9% per year simple interest.
They each leave the money in their account for 5 years.

At the end of 5 years, how much more money does Samuel have in his account than Nina has in hers?

$ .... [4]

24 In a sale, the price of a coat is reduced by 25%.
The sale price is $120.

Calculate the price of the coat before the sale.

.... [2]

25 (a) The price of an electric drill is $78.
In a sale, the price is reduced by 15%.

Calculate the sale price.

.... [2]

(b) The exchange rate between dollars ($) and euros (€) is $1 = €0.85.
Michael changes $100 to euros.
He buys a clock costing €58.99.
He changes the remaining money back to dollars.

Calculate the amount, in dollars, he has left.

.... [2]

(c)

ACE SIMPLE		COOL COMPOUND
Simple interest at 2.1% per year		Compound interest at 2% per year

Pietro invests $3500 in the Ace Simple account for 4 years.
Eliana invests $3500 in the Cool Compound account for 4 years.

At the end of the 4 years, who has more money in their account and by how much?

.... by $ .... [4]

26 During one year the value of a bicycle decreased from $200 to $160.

Calculate the percentage decrease in the value of the bicycle.

.... % [2]

27 (a) Jasmine buys a family holiday to India.
Here is some information about the cost.

Flights	$700
Hotel	$1550
Total cost	$2250

(i) In October, Jasmine pays a deposit of 12% of the total cost.
She pays the rest of the total cost in December.

Calculate the amount she pays in December.

$ .... [2]

28 (a) (i) Josef books a holiday for 3 people.
The holiday costs $420 per person.
Josef pays a deposit of 20% of the total cost of the holiday.

Calculate the amount Josef pays as the deposit.

.... [2]

(ii) Josef pays a total of $85.68 for airport parking for 8 days.
This price includes a reduction of 15% of the full price for booking early.

Calculate the full price for airport parking for 1 day.

.... [3]

29 (a) In 2021, the cost of posting a letter was 84 cents.

   (i) A company posts 1950 letters.

   Find the cost, in dollars, to post these letters.

   $ .... [1]

   (ii) In 2022, the cost of posting a letter is 96 cents.

   Calculate the percentage increase in the cost of posting a letter.

   ....% [2]

(b)

Cost of posting a letter is 96 cents
15% discount when monthly postage is more than $1000

Company *A* posts 1200 letters in one month.
Company *B* posts fewer letters than Company *A* in the same month.
Company *A* and Company *B* each pay the same amount to post their letters that month.

Find the number of letters Company *B* posts in that month.

.... [3]

(c) In 2022, the cost of posting a parcel with a mass of 1 kg or less is $4.60 .
The cost increases by $1.10 for each additional 0.5 kg.

Find the cost of posting a parcel with a mass of 3.5 kg.

$ .... [2]

(d) The cost of posting parcels increases by 7.2%.
After the increase, the cost of posting a parcel is $13.40 .

Calculate the original cost of posting this parcel.

$ .... [2]