POMEGRANATE JUICE

FINANCIAL LITERACY SERIES **LEVEL 3 (AGES 13 – 17)**

A PROJECT OF THE STATE BANK OF PAKISTAN
& THE ASIAN DEVELOPMENT BANK

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THE FINANCIAL LITERACY SERIES

Welcome to the State Bank of Pakistan's Financial Literacy Series (NFLP-Y, or the National Financial Literacy Program for Youth) Level 3 (*Pomegranate Juice*). This is the third in a series of four books aimed at helping both children and young adults understand and apply principles of financial planning in their daily lives.

In this book, you will follow the stories of two families as they deal with financial and commercial matters. Financial literacy refers to the skill and knowledge of a person in handling matters such as saving, managing income, curbing expenses, investing, borrowing, budgeting and planning. A person who is financially literate will make better financial plans and decisions for their present and future. Everyone can benefit from stronger financial literacy skills.

The heroes in our storybook deal with different issues at various stages in their lives. In the process of reading the story, you will learn how our heroes tackle these issues. You and your family may enjoy reading this book together.

The books in this series are:

Financial Literacy Series Level 1 (*One Pomegranate, Two Pomegranates*) Ages 5 – 8
Financial Literacy Series Level 2 (*The Pomegranate Tree*) Ages 9 – 12
Financial Literacy Series Level 3 (*Pomegranate Juice*) Ages 13 – 17
Financial Literacy Series Level 4 (*The Pomegranate Enterprise*) Ages 18 – 29

If you enjoy this book, we encourage you to read all the books in this series!
We wish you happy reading and great success in everything you do!

HOW TO USE THIS BOOK

Dear Students and Parents,

Welcome to State Bank of Pakistan's Financial Literacy Series (NFLP-Y) Level 3: *Pomegranate Juice*. This book is written for adolescents of ages 13 – 17 years but it can be useful to people of all ages.

Everyone needs to learn about handling money—earning, spending, saving, borrowing, planning and many other things! Here is a fun and easy way to learn how to handle money.

Students, we hope that you go through this book with your parents, brothers and sisters and friends.

Parents, we hope that you go through this book with your children. They will learn a lot if you talk to them about your personal experiences as you go through this book with them.

This book has three storybooks and three workbooks. Each workbook is linked to a storybook.

Please meet the people in our stories.

MEET THE FAMILY IN THE CITY

Shereen is 15 years old. Her favorite subjects in school are math and science. She and her cousin Ali have developed a small pomegranate business.

Daniyal is Shereen's 13-year-old brother. He loves playing cricket and is also very fond of animals. He plans to become a doctor.

Safdar is Shereen and Daniyal's father. He owns and runs a fruit shop.

Rabia is Shereen and Daniyal's mother. She teaches math at a local school and helps her children with their homework.

MEET THE FAMILY IN THE VILLAGE

Ali is 15 years old. He is Shereen's cousin. He likes exploring and learning about nature. He takes care of seven pomegranate trees in his spare time.

Nusrat is Ali's mother and Safdar's sister. She owns a small farm where she lives with her son.

THE WORKBOOKS

The workbooks have four types of content:

These pages provide you with information about money matters.

INFORMATION

These pages have exercises. Try to complete them by yourself or with your parents, brothers and sisters, or friends!

ACTIVITY

These pages give you answers for the exercises you will have completed.

SOLUTION

These pages give you the meanings of words related to money matters.

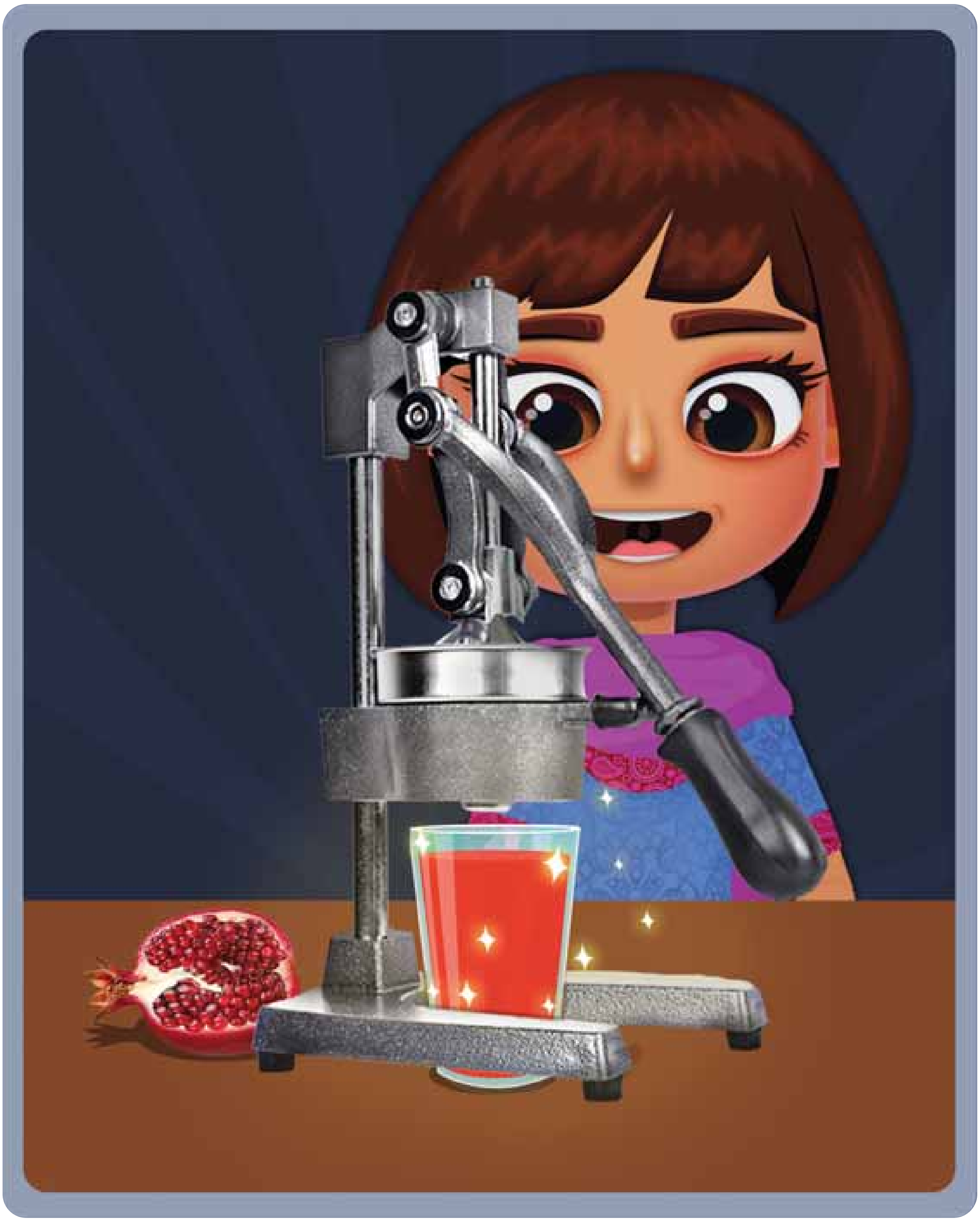
GLOSSARY

We wish you an enjoyable and fruitful learning journey.

Yours,

Shereen

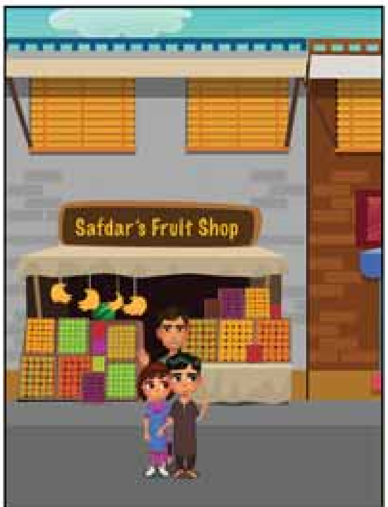
POMEGRANATE JUICE



Shereen is 15 years old and her brother Daniyal is 13. They live in the city with their father, Safdar, and their mother, Rabia.

Their cousin, Ali, who is also 15 years old, lives on a small farm with his mother, Nusrat.

A few years ago, Shereen and Ali had started growing pomegranate trees at the farm. They now have seven trees.

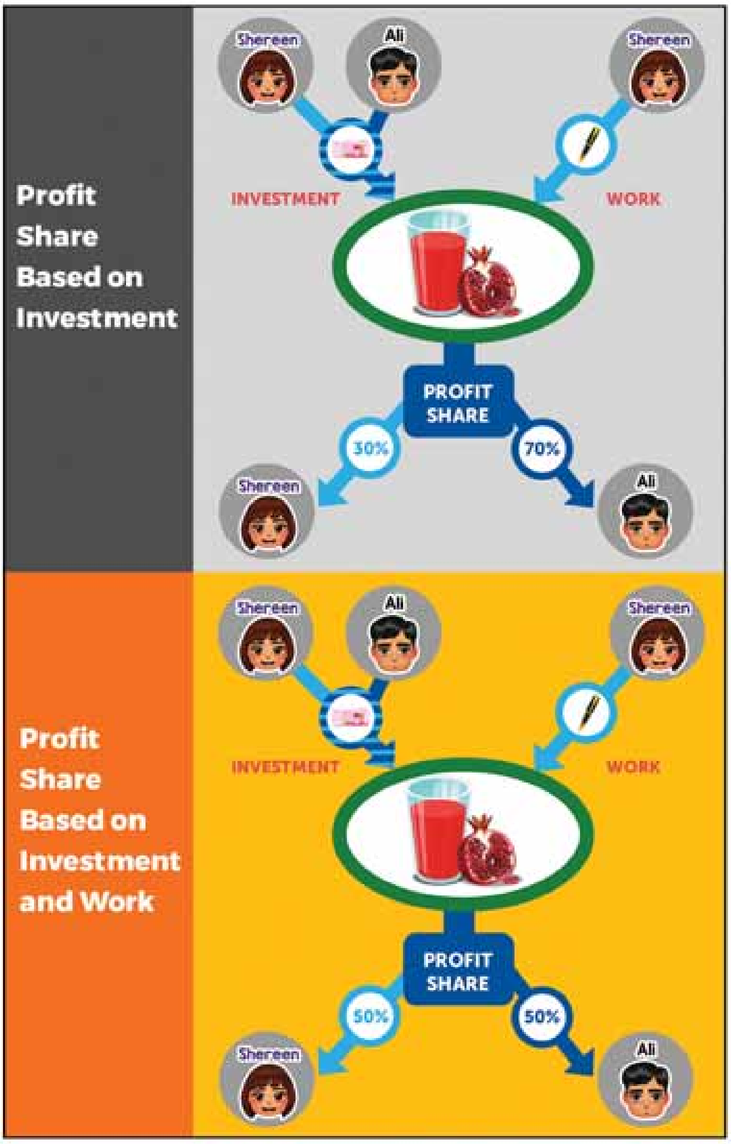


Shereen and Ali sell the fruit at Safdar's fruit shop in the city. They each make some money from the sale of the fruit.

Profit and Loss (Rs.)	
Category	Year 1
Income	
Number of trees	7
Fruit per tree (kg)	30
Total fruit (kg)	210
Fruit price (per kg)	200
Total	42,000
Expenses	
Total fruit (kg)	210
Transport cost (per kg)	100
Total transport cost	21,000
Total	21,000
Profit (Loss)	21,000

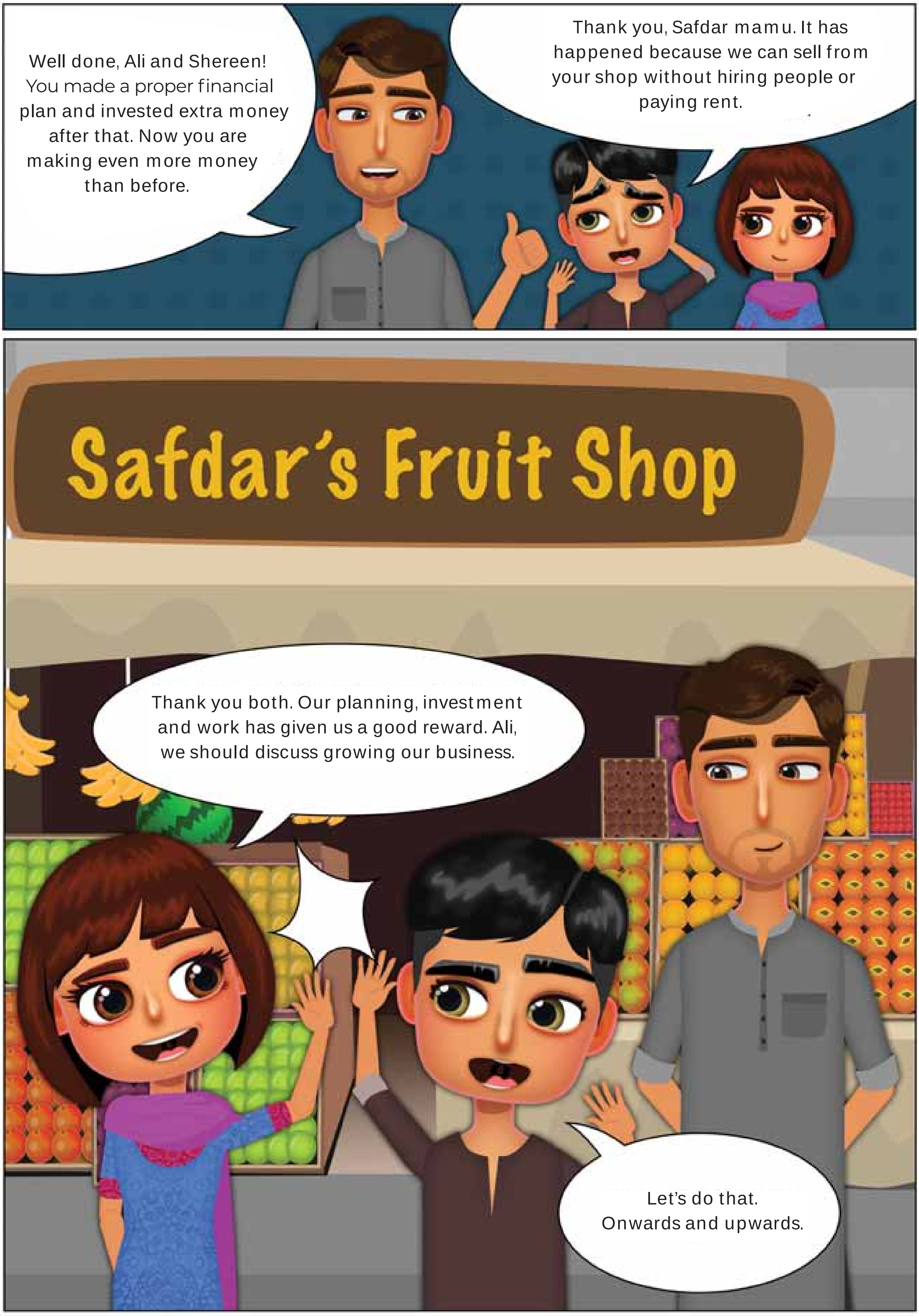
Ali is visiting the city.

Shereen and Ali calculate the income, expenses and profit for if they just sell fruit or if they sell both fruit and juice.



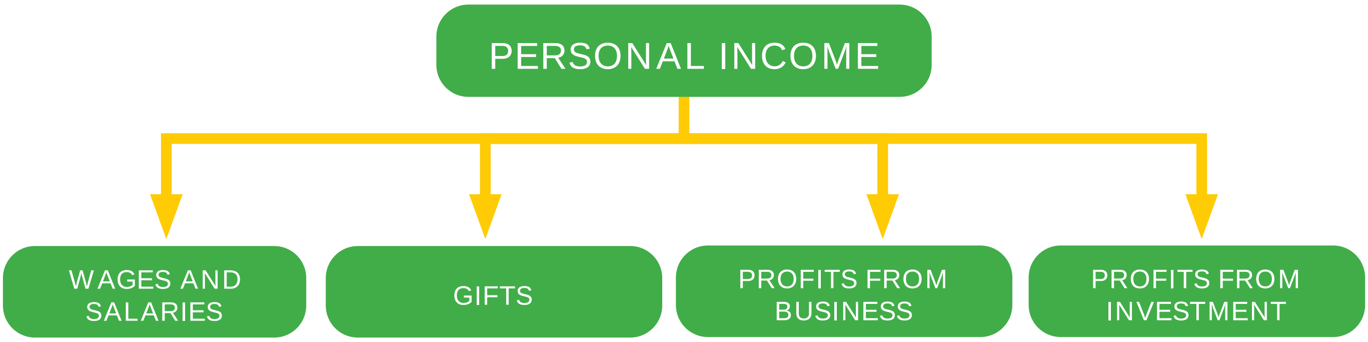
Profit and Loss (Rs.)	
Category	**Year 1**
Income	
Income from fruit sales	25,200
Income from juice sales	33,600
Total	58,800
Expenses	
Total transport cost	21,000
Juice equipment expenses	12,000
Total	33,000
Profit (Loss)	25,800
Profit Share	
Shereen's profit share	50%
Ali's profit share	50%
Profit to Shereen	12,900
Profit to Ali	12,900
Profit	25,800

The cousins agree. They buy their juice machine and get started. The business grows well, and a lot of their fruit is being sold as juice. They are making more money than before. Safdar is very happy too.


Well done, Ali and Shereen! You made a proper financial plan and invested extra money after that. Now you are making even more money than before.
Thank you, Safdar mamu. It has happened because we can sell from your shop without hiring people or paying rent.
Safdar's Fruit Shop
Thank you both. Our planning, investment and work has given us a good reward. Ali, we should discuss growing our business.
Let's do that. Onwards and upwards.

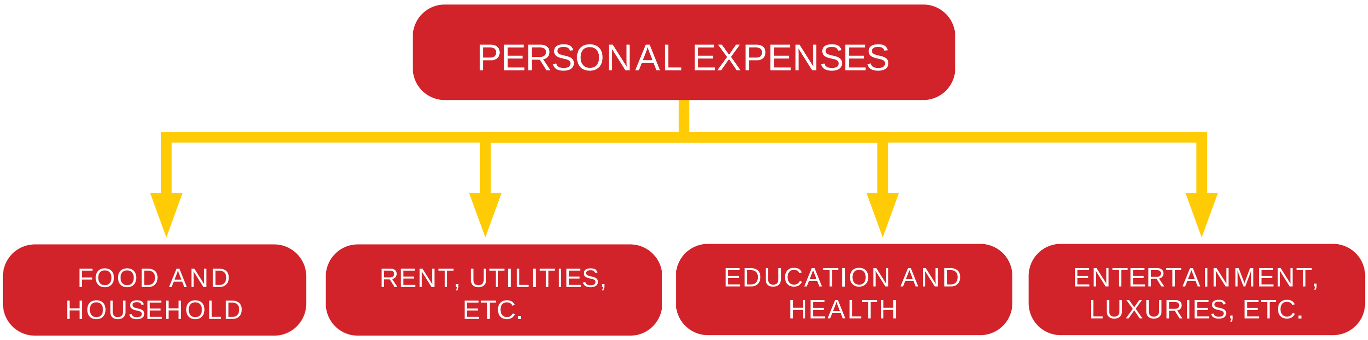
POMEGRANATE JUICE WORKBOOK

INCOME: PERSONAL INCOME AND EXPENSES



Income may include:

- Wages and salaries (e.g., Rabia has a salary as a teacher, and Salim gets an hourly wage for transporting fruit)
- Gifts from others (e.g., Safdar and Rabia give the children pocket money)
- Profits from business (e.g., Safdar gets a profit from his fruit shop)
- Profits from investment (e.g., profit received on savings in a savings account)



Expenses may include:

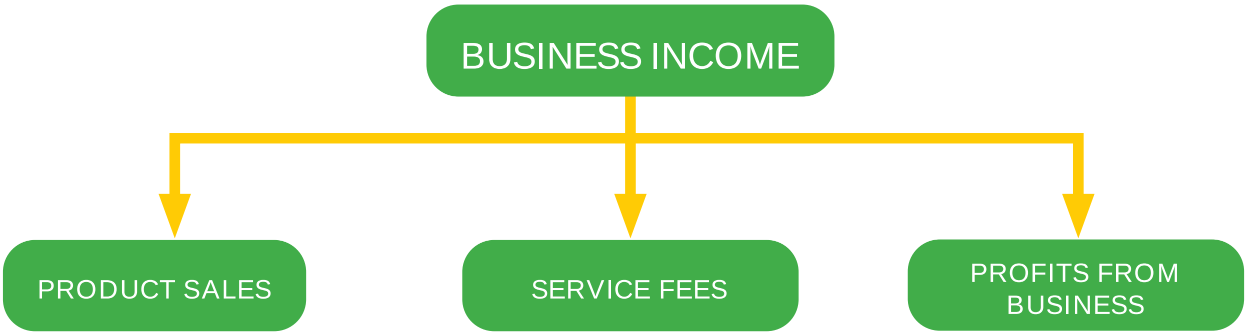
- Food and household expenses (e.g., Safdar buys vegetables, medicine and cleaning products from the shop)
- Rent, electricity and gas
- Education fees and doctor fees
- Entertainment, luxuries and gifts (e.g., Safdar and Rabia pay for movie tickets for the whole family)

The most important financial aim of a family is that, for any given period, income should be greater than expenses.

income
expenses
wages
pocket money

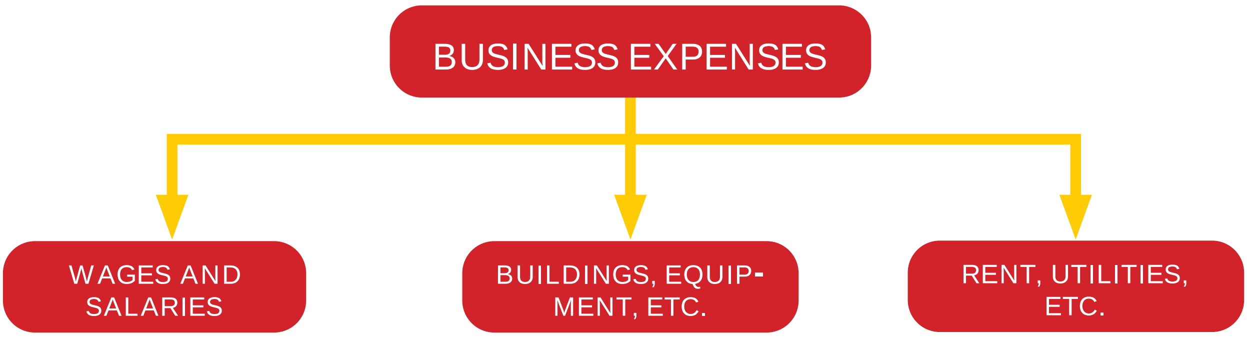
INCOME: BUSINESS INCOME AND EXPENSES

A business has income from different sources and expenses of different types.



Income may include:

- Selling products (e.g., a shop sells fruit)
- Providing services (e.g., a lawyer provides legal advice)
- Licensing assets (e.g., Microsoft licenses its Word and Excel systems)



Expenses may include:

- Wages and salaries of employees
- Buildings, equipment and other assets needed to run the business (these are also called 'capital expenses')
- Rent, utilities, transport and payments for products and services (these are also called 'operating expenses')

The most important financial aim of a business is that, for any given time period, income should be greater than expenses.

assets
licensing
salary
capital expenses
operating expenses

INCOME: INCOME AND EXPENSES

Identify which activities are income and which are expenses:

		Income	Expense
1.	Rabia buys vegetables for dinner.		
2.	Safdar sells 40 kg of fruit on Thursday.		
3.	Ali gets pocket money from his mother, Nusrat. (What is this from Ali's point of view?)		
4.	Nusrat gives her son Ali pocket money. (What is this from Nusrat's point of view?)		
5.	Safdar's fruit shop has sales of Rs. 80,000 in January.		

profit
pocket money

The solution to this exercise can be found on page 141

INCOME: SOURCES OF INCOME

What are some of your, your family members' or your friends' sources of income for one month?

		Details
1.	**Profits from business**	
2.	**Earnings from investments**	
3.	**Wages**	
4.	**Gifts**	

INCOME: INCOME, EXPENSES, SAVINGS AND PROFIT

PROFIT AND LOSS

INCOME − EXPENSES = INDIVIDUAL SAVING

INCOME − EXPENSES = BUSINESS **PROFIT (LOSS)**

Rs. e.g.

Income		Expenses		Profit
1,200	−	1,000	=	200

Income		Expenses		Loss
900	−	1,000	=	(100)

In the case of an individual, if income is greater than expenses, he or she will have savings.

In the same way, in the case of a business, if income is greater than expenses, it will have a profit.

But, in the case of a business, if expenses are greater than income, it will have a loss.

Usually, a loss is written within brackets. In our example, profit is written as '200' and loss is written as '(100)'.

INCOME: INCOME, EXPENSES, PROFIT AND LOSS

The most basic calculations in a business relate to:

1. Income – price of goods sold **x** quantity of goods sold; and

2. Expenses – cost of goods bought **x** quantity of goods bought.

INCOME, EXPENSES AND PROFIT

INCOME – EXPENSES = PROFIT (LOSS)

Rs. e.g.

	Items sold		Price		
INCOME	100	x	12	=	1,200
	Items bought		Cost		
EXPENSES	100	x	10	=	1,000
	Income		Expenses		
PROFIT	1,200	–	1,000	=	200

In the case of income, multiply the number of goods sold by the price at which you sold these goods. In our example, 100 items were sold at Rs. 12 each. This resulted in income of Rs. 1,200.

In the case of expenses, multiply the number of goods bought by the price at which you bought these goods. In our example, 100 items were bought for Rs. 10 each. This resulted in expenses of Rs. 1,000.

This is the basic calculation of a business. But there are other expenses too: salaries, equipment, rent, etc. We have provided you a simple example here.

INCOME: BUSINESS LOSS, BREAK EVEN AND PROFIT

Because it takes time to get customers, businesses often start with losses, then go to break even and then to profits.

Business loss, break even and profit

	Year 1	Year 2	Year 3	Year 4	Year 5
Income	1,000	1,500	2,000	2,500	3,000
Expenses	1,300	1,600	2,000	2,400	2,600
Profit (Loss)	(300)	(100)	0	100	400
	Loss		Break Even	Profit	

- **Loss:** Often, in the early years of a business, expenses will be more than income. This will result in a loss. To have enough money to cover losses, business owners will invest money in the business.
- **Break Even:** Once there are enough customers and income increases, a well-managed business will get to break even. At this point, income and expenses equal each other. Business owners will plan for businesses to get to break even as fast as possible.
- **Profit:** If businesses are well-managed, as they grow customers and income, their expenses will grow less slowly. This will result in profits. Business owners will keep some of the profit in the business to grow in the future or to cover losses that may happen in the future.

INCOME: SHEREEN AND ALI'S PROFIT AND LOSS

Help Shereen and Ali calculate their profit or loss:

Profit and Loss (Rs.)		
No.	**Category**	**Year 1**
Income		
1.	Number of trees	7
2.	Fruit per tree (kg)	30
3.	Total fruit (kg)	
4.	Fruit price per kg	200
5.	Total income	
Expenses		
7.	Total fruit (kg)	210
8.	Transport expenses per kg	100
9.	Total expenses	
10.	**Profit/Loss**	

transport

The solution to this exercise can be found on page 141

INCOME: JUICE BUSINESS

?

Help Shereen and Ali calculate their profit and loss if 40% of their sales come from juice, and a juice machine costs Rs. 12,000:

Profit and Loss (Rs.)		
No.	**Category**	**Year 1**
Income		
1.	Total fruit (kg)	210
2.	Fruit price per kg	200
3.	Juice price per kg	400
4.	% of fruit sold as fruit	60%
5.	% of fruit sold as juice	40%
6.	Income from fruit sales	
7.	Income from juice sales	
8.	**Total**	
Expenses		
9.	Total fruit (kg)	210
10.	Transport expenses per kg	100
11.	Total transport expenses	21,000
12.	Juice equipment expenses	
13.	**Total**	
14.	**Profit (Loss)**	

The solution to this exercise can be found on page 142

INCOME: RISKS AND REWARDS OF TWO BUSINESSES

Help Shereen and Ali discuss the risks and rewards of the fruit and juice business:

Profit & Loss Comparison			
	Year 1	**Fruit Only**	**Fruit & Juice**
Income			
1.	Total fruit (kg)	210	210
2.	Fruit price per kg	200	200
3.	Juice price per kg	0	400
4.	% sold as fruit	100%	60%
5.	% sold as juice	0%	40%
6.	Income from fruit sales	42,000	25,200
7.	Income from juice sales	-	33,600
8.	Total	42,000	58,800
Expenses			
9.	Total fruit (kg)	210	210
10.	Transport cost per kg	100	100
11.	Total transport cost	21,000	21,000
12.	Juice equipment cost	0	12,000
13.	Total	21,000	33,000
14.	Profit (Loss)	21,000	25,800

INCOME: RISKS AND REWARDS OF TWO BUSINESSES

Using the table on the previous page, discuss the following:

1. Which business needs more investment? How much more investment?

2. Which business earns more reward, or profit?

3. Which business involves more risk?

4. What is the relationship between risk and reward? Does higher risk always lead to higher reward?

risk
reward

The solution to this exercise can be found on page 143

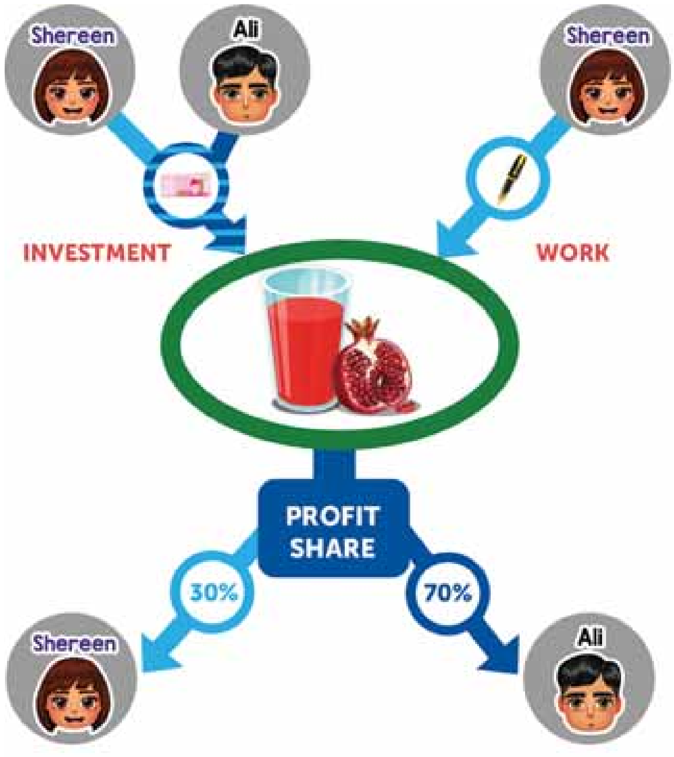
INVESTMENT: SHARING PROFITS

We can divide the profits from a business in different ways.

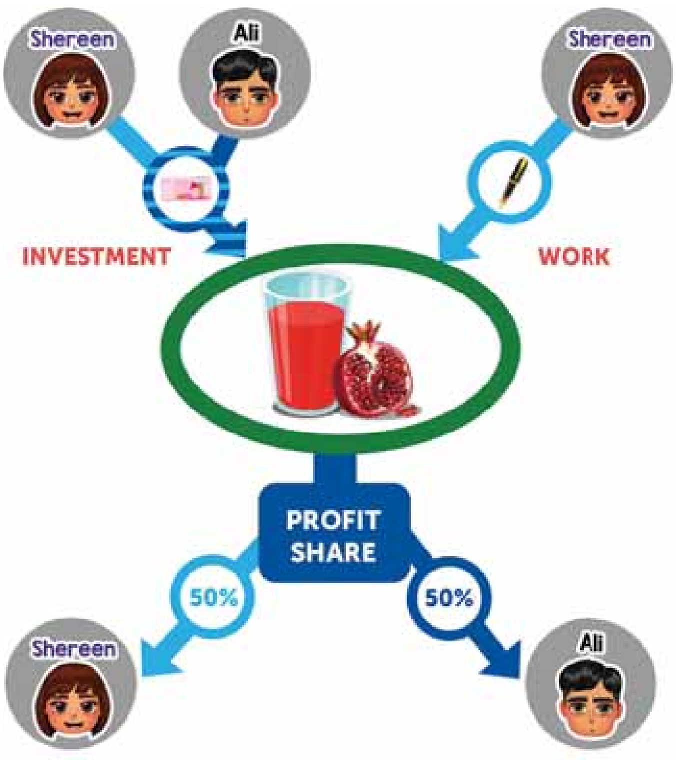
In our example, Shereen and Ali put in money (invest) to expand their business by buying a juice maker. Apart from the money needed to purchase the juice maker, Shereen puts in a lot of extra work by taking out the pomegranate seeds and extracting the juice.

In **Example A,** the profits are only shared by Shereen and Ali as investors of money.

In **Example B,** the profits are shared by Shereen and Ali as investors of money PLUS Shereen gets an added share of the profits because of her extra work.



Example A



Example B

investment
harvest

INVESTMENT: CALCULATING PROFIT SHARE BY INVESTMENT

Let's see how to calculate profit share by investment only. In our story, Shereen and Ali invest Rs. 12,000 to buy a juice maker together. Shereen puts in 30% of the money, and Ali puts in 70%. The business makes a total profit of Rs. 25,800.

Profit Share Based on Financial Investment

		Shereen	Ali	Total
1.	Total Profit (Rs.)			25,800
2.	Investment (Rs.)	3,600	8,400	12,000
3.	Profit Share (%)	30%	70%	100%
4.	Profit Share (Rs.)	7,740	18,060	25,800

Amount of money put into the business.

The division of profit as a percentage of total investment

The % of investment multiplied by the total profit.

STEP 1:

Calculate the amount of money that each person put in the business as a % of total investment (Rs. 12,000). Shereen put in 30% and Ali put in 70%.

STEP 2:

Use the same % to calculate their share of profits. The total profit is Rs. 25,800. If we use the same %, Shereen will get 30% (Rs. 7,740) and Ali will get 70% (Rs. 18,060).

profit share

INVESTMENT: CALCULATING PROFIT SHARE BY INVESTMENT AND WORK

Let's now see how to calculate profit share by investment and work.

In this example, Shereen puts in a total of Rs. 3,600 and Ali puts in a total of Rs. 8,400. This is the total amount of their financial investment.

But because Shereen also 'invests' in the business by putting in extra work, the cousins agree that both Ali and Shereen will share equally in the profits.

The business made a total profit of Rs. 25,800.

Profit Share Based on Financial Investment and Work

		Shereen	Ali	Total
1.	Total Profit (Rs.)			25,800
2.	Investment (Rs.)	3,600	8,400	12,000
3.	Profit Share (%)	50%	50%	100%
4.	Profit Share (Rs.)	12,900	12,900	25,800

Amount of money put into the business.

The % of profit share as agreed by Shereen and Ali.

The % of investment multiplied by the total profit.

Use the % agreed by Shereen and Ali to calculate their share of the profits. The total profit is Rs. 25,800. If we use the agreed %, Shereen will get 50% (Rs. 12,900) and Ali will also get 50% (Rs. 12,900).

INVESTMENT: FAIRNESS VS. PRACTICALITY

In financial planning, we often need to think about fairness and practicality.

FAIRNESS

Are my actions fair to all involved?

PRACTICALITY

Will my actions help me meet my goals?

Most of the time, it is BOTH fair and practical to take an action.

Action	Fairness	Practicality
If one business partner puts in more work than the other, the first business partner gets extra shares or benefits.	This is fair because the first business partner has put in more work.	This is practical because if you do not give extra shares or benefits to the first business partner, they may put in less work.
If you have a commitment to one person (e.g., to sell a product), don't break that commitment even if you find a short-term benefit elsewhere (e.g., someone offers you more money for the same product).	This is fair because you have made a commitment and the first person trusts you will live up to your agreement.	This is practical because if you break your commitment, you will lose the trust of the first person. Over time, other people may also lose trust in you.

INVESTMENT: PROFIT SHARING AND FAIRNESS

Here are two examples of profit sharing. In the first example, Shereen and Ali share profit based only on financial investment. In the second example, they share profit based on financial investment and work.

Profit Share Based on Financial Investment				
		Shereen	**Ali**	**Total**
1.	Profit Share (%)	30%	70%	100%
2.	Profit Share (Rs.)	7,740	18,060	25,800

Profit Share Based on Financial Investment and Work				
		Shereen	**Ali**	**Total**
3.	Profit Share (%)	50%	50%	100%
4.	Profit Share (Rs.)	12,900	12,900	25,800

Based on these examples, answer the following questions:

1. Should Shereen and Ali have divided the profits by financial investment only or by financial investment plus work?

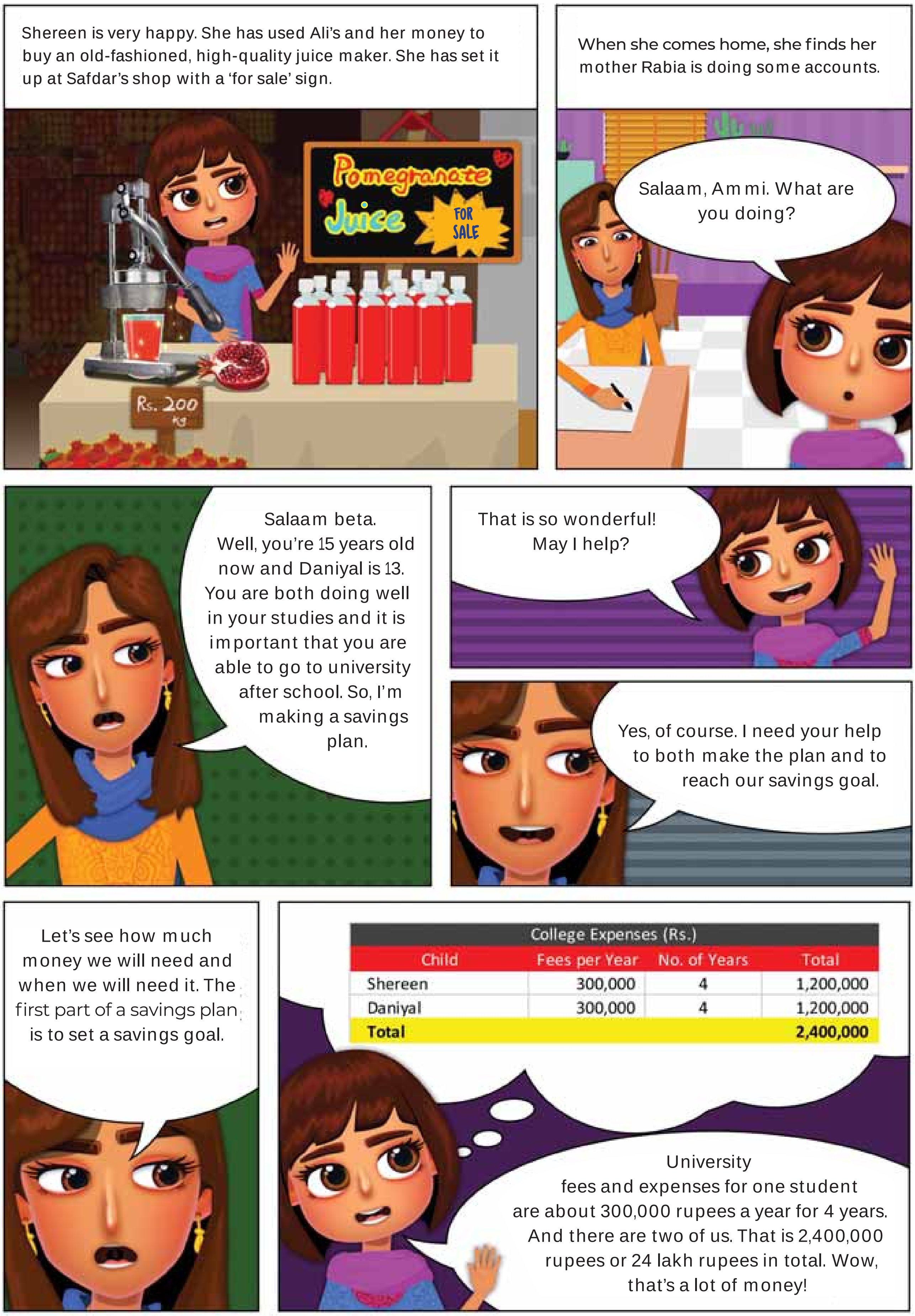
2. Which approach is more fair? Why?

3. Which approach makes more financial sense? Why?

4. Would your answer be different if Shereen was taking a salary for her work?

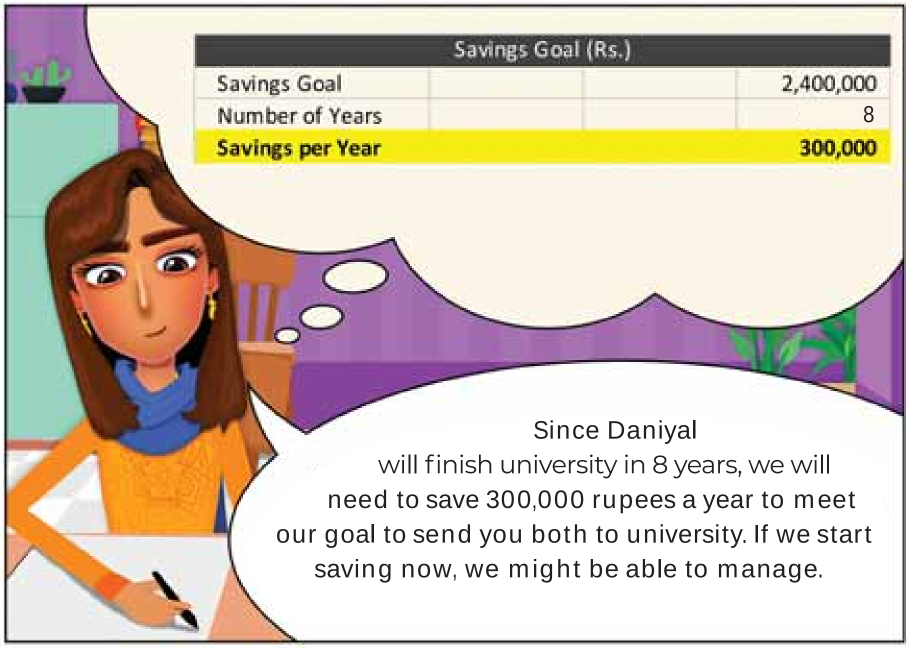
The solution to this exercise can be found on page 143

PLANNING FOR UNIVERSITY


Shereen is very happy. She has used Ali's and her money to buy an old-fashioned, high-quality juice maker. She has set it up at Safdar's shop with a 'for sale' sign.
Pomegranate Juice
FOR SALE
Rs. 200 kg
When she comes home, she finds her mother Rabia is doing some accounts.
Salaam, Ammi. What are you doing?
Salaam beta. Well, you're 15 years old now and Daniyal is 13. You are both doing well in your studies and it is important that you are able to go to university after school. So, I'm making a savings plan.
That is so wonderful! May I help?
Yes, of course. I need your help to both make the plan and to reach our savings goal.
Let's see how much money we will need and when we will need it. The first part of a savings plan is to set a savings goal.

College Expenses (Rs.)			
Child	Fees per Year	No. of Years	Total
Shereen	300,000	4	1,200,000
Daniyal	300,000	4	1,200,000
Total			2,400,000

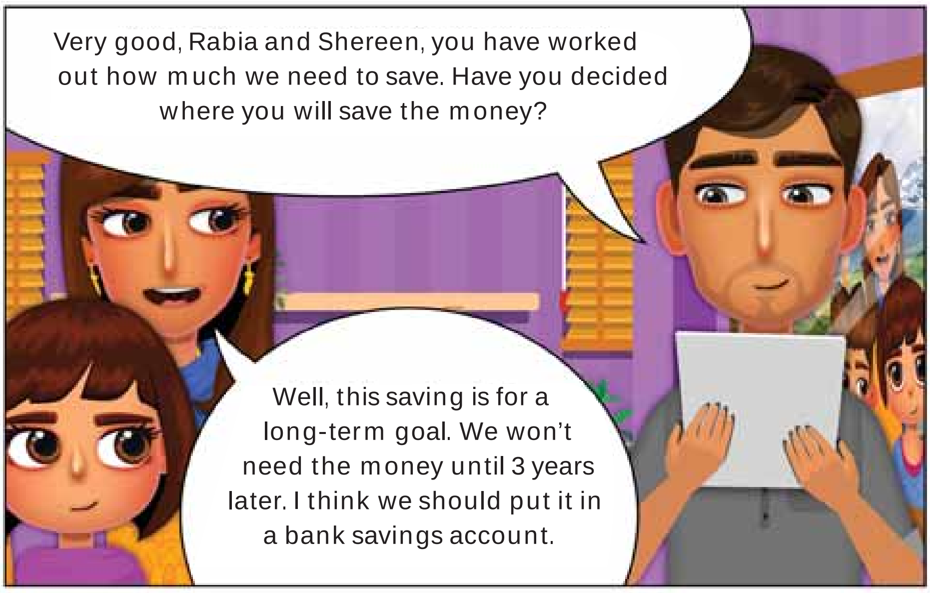
University fees and expenses for one student are about 300,000 rupees a year for 4 years. And there are two of us. That is 2,400,000 rupees or 24 lakh rupees in total. Wow, that's a lot of money!

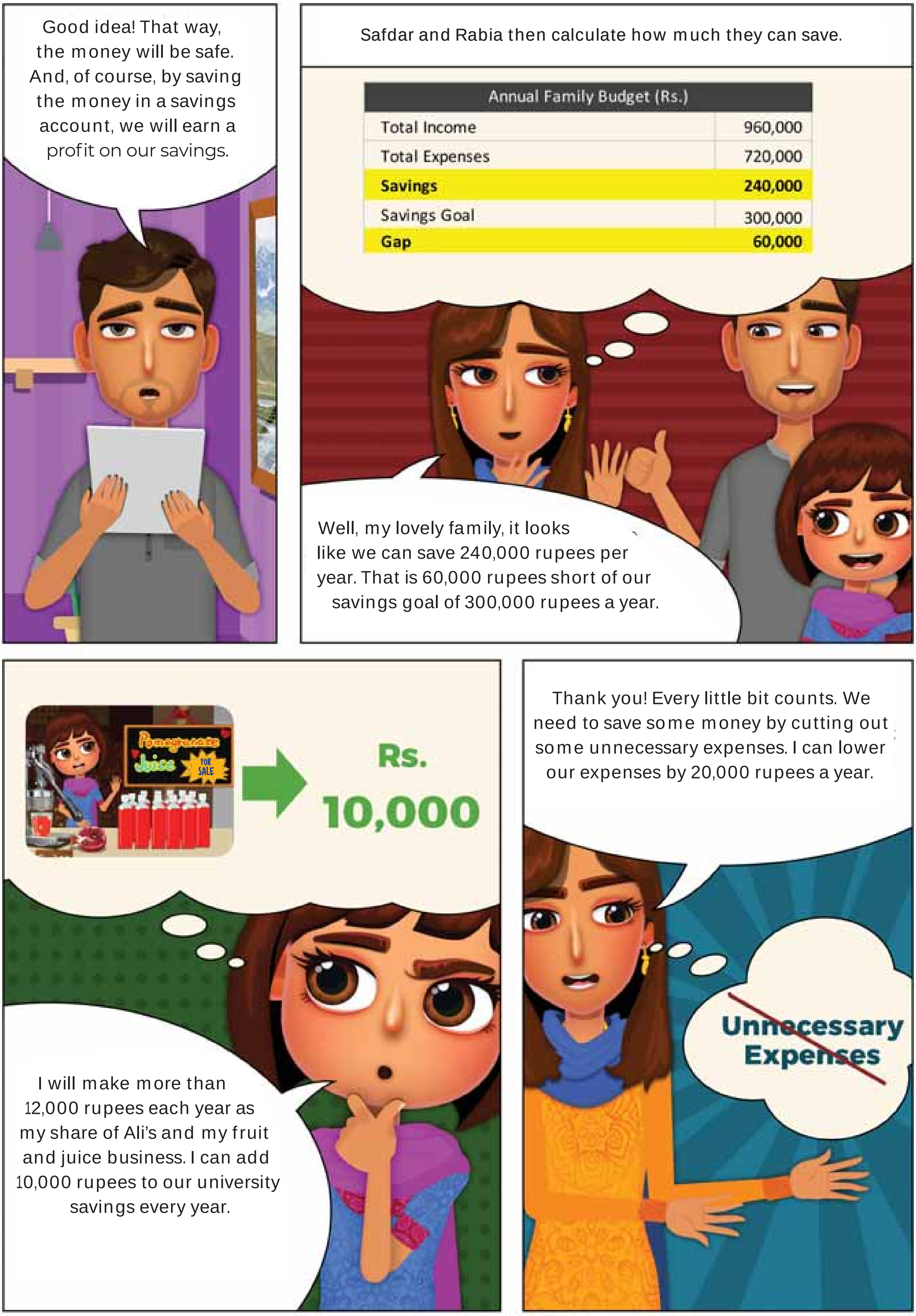

Savings Goal (Rs.)
Savings Goal 2,400,000
Number of Years 8
Savings per Year 300,000
Since Daniyal will finish university in 8 years, we will need to save 300,000 rupees a year to meet our goal to send you both to university. If we start saving now, we might be able to manage.


For two years, Daniyal and I will be in university at the same time. In these two years, there will be university fees to pay for two people.

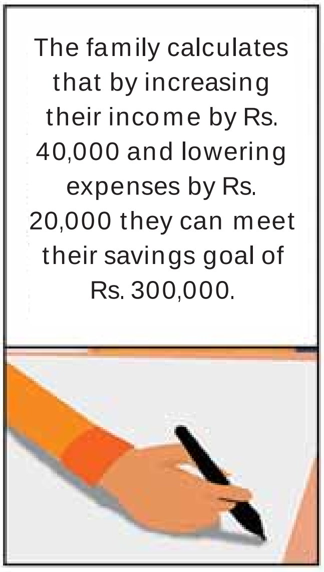

Saving & Spending for University
Saving
Spending
Year
1
2
3
4
5
6
7
8


That evening, when Safdar got back, they looked at the savings plan.


Very good, Rabia and Shereen, you have worked out how much we need to save. Have you decided where you will save the money?
Well, this saving is for a long-term goal. We won't need the money until 3 years later. I think we should put it in a bank savings account.


Good idea! That way, the money will be safe. And, of course, by saving the money in a savings account, we will earn a profit on our savings.
Safdar and Rabia then calculate how much they can save.
Annual Family Budget (Rs.)
Total Income 960,000
Total Expenses 720,000
Savings 240,000
Savings Goal 300,000
Gap 60,000
Well, my lovely family, it looks like we can save 240,000 rupees per year. That is 60,000 rupees short of our savings goal of 300,000 rupees a year.
Pomegranate Juice
FOR SALE
Rs. 10,000
I will make more than 12,000 rupees each year as my share of Ali's and my fruit and juice business. I can add 10,000 rupees to our university savings every year.
Thank you! Every little bit counts. We need to save some money by cutting out some unnecessary expenses. I can lower our expenses by 20,000 rupees a year.
Unnecessary Expenses


And I really like what Shereen and Ali are doing. I am going to expand my fruit shop so we sell all kinds of fruit juices. That will give us an extra income of at least 30,000 rupees per year, maybe a lot more.

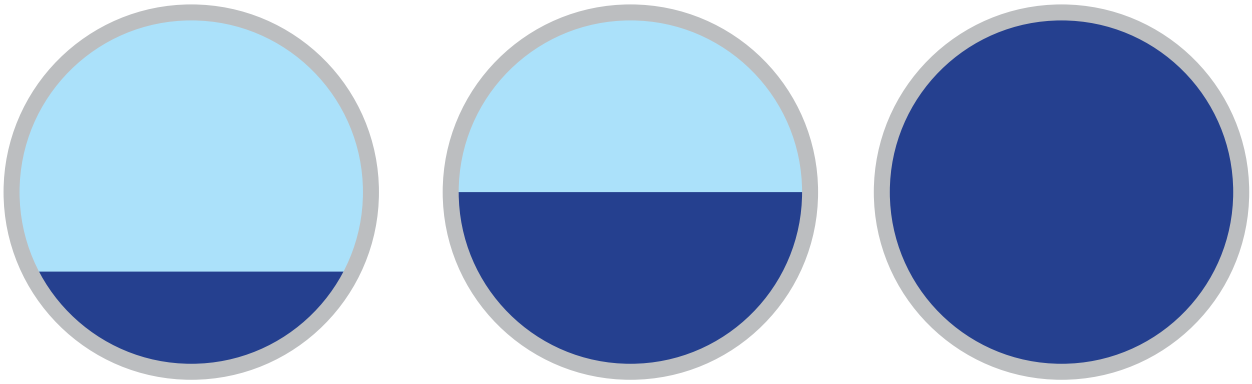

The family calculates that by increasing their income by Rs. 40,000 and lowering expenses by Rs. 20,000 they can meet their savings goal of Rs. 300,000.


SAVING GOAL
INCOME
EXPENSES
SAVINGS
NOW
960,000
720,000
240,000
Gap of
60,000
Shereen
adds to income
10,000
Safdar
adds to income
30,000
20,000
PLANNED
1,000,000
700,000
300,000
cuts spending by


I am so happy! Ammi, I will study hard. Abba, I will also help you grow your business.

PLANNING FOR UNIVERSITY WORKBOOK

SAVINGS: TYPES OF GOALS



Short-Term Savings Goals
(can be achieved in fewer than 6 months)

Medium-Term Savings Goals
(may take from 6 months to 3 years to achieve)

Long-Term Savings Goals
(require 3 years or more to achieve)

1.	Daniyal wants to buy some *halwa* this week.	Safdar wants to hire someone to repaint his house next winter.	Nusrat wants to build a large greenhouse to grow vegetables in 5 years.
2.	Rabia wants to buy Shereen a toy for her birthday next month.	Daniyal and Shereen want to buy a juice machine in 1 year.	Shereen wants to go to university in 6 years.
3.	Safdar needs money to get his fridge within 6 months.	Ali wants to buy 6 more pomegranate trees in 7 months.	Safdar wants to buy a home for his family in 10 years.

SAVINGS: TYPES OF GOALS

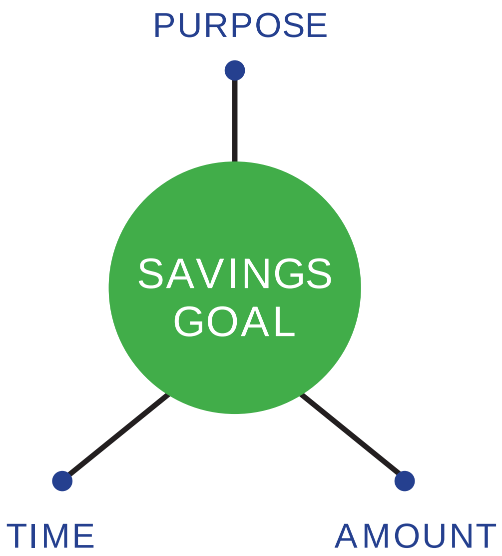
Which of these are short-term, medium-term and long-term goals?

	Person	Amount to be saved (Rs.)	Amount saved each month (Rs.)	How many months	Short- Medium- or Long-term?
1.	Rabia	25,000	2,083	12	
2.	Safdar	100,000	5,000	20	
3.	Daniyal	2,500	1,250	2	
4.	Shereen	400,000	6,666	60	

The solution to this exercise can be found on page 144

SAVINGS: SAVINGS GOAL

A well-developed savings goal usually involves three things: (1) the purpose of your savings goal; (2) the amount of money to be saved; and (3) the time period in which you want to reach your savings goal.



- Purpose: the reason you want to save. E.g., "I want to buy a bicycle."
- Amount: the amount of money you want to save. E.g., "I want to save Rs. 20,000."
- Time: the time period within which you want to reach your savings goal. E.g., "I want to save Rs. 20,000 in 3 months."

SAVINGS: SAVINGS PLAN

A savings plan allows you to meet a savings goal.

Savings Plan					
1. Savings goal	10,000				
2. Period	**Now**	**Month 1**	**Month 2**	**Month 3**	
3. Income	-	20,000	20,000	20,000	
4. Expenses	-	16,000	20,000	17,000	
5. Savings per month	-	4,000	0	3,000	
6. Total savings	3,000	7,000	7,000	10,000	

How much money you want to save

The period of time over which you will save

Your savings in a given period

The sum of your savings

For example, Rabia makes a savings plan to buy a tablet for Rs. 10,000 within the next 3 months.

She currently has savings of Rs. 3,000.

She has a monthly income of Rs. 20,000.

In the first month, she can save Rs. 4,000. Her total savings grow to Rs. 7,000.

In the next month, her expenses are Rs. 20,000, the same as her income. She has no savings. Her total savings stay at Rs. 7,000.

In the third month, she cuts her expenses to Rs. 17,000 and saves Rs. 3,000.

Therefore, after 3 months, her total savings reach Rs. 10,000 and she is able to buy the tablet.

savings plan
savings goal

SAVINGS: SAVINGS AND WITHDRAWALS

Sometimes, you need to take money out of your savings. This is called a withdrawal (i.e., taking money out of your savings, whether at home or your bank account). You can use the term ‘withdrawal from savings’ even if you save at home.

Savings Plan					
1.	Savings goal	10,000			
2.	Period	**Now**	**Month 1**	**Month 2**	**Month 3**
3.	Income	-	20,000	20,000	20,000
4.	Expenses	-	16,000	22,000	17,000
5.	Savings per month	-	4,000	(2,000)	3,000
6.	Total net savings	5,000	9,000	7,000	10,000

The sum of your savings minus your withdrawals.

In finance, negative numbers are often written in brackets. This means we have to subtract these numbers.

For example, Rabia makes a savings plan to buy a tablet for Rs. 10,000 within the next 3 months.

She currently has savings of Rs. 5,000.

She has a monthly income of Rs. 20,000.

In the first month, she can save Rs. 4,000. Her total savings grow to Rs. 9,000.

In the next month, her expenses are Rs. 22,000, which is Rs. 2,000 MORE than her income. She has to WITHDRAW Rs. 2,000 from her savings to meet her expenses. Her total savings go down to Rs. 7,000 (Rs. 9,000 – Rs. 2,000).

In the third month, she cuts her expenses to Rs. 17,000 and saves Rs. 3,000.

Therefore, after 3 months, her total savings reach Rs. 10,000 and she is able to buy the tablet.

withdrawal

SAVINGS: SETTING A SAVINGS GOAL

A savings plan allows you to meet a savings goal (i.e., how much money to save). Rabia and Shereen are making a family savings plan to save money to send Shereen and Daniyal to university.

University fees and expenses for one student are about Rs. 300,000 a year for 4 years.

Shereen starts university in 3 years (Year 3) and Daniyal starts university in 5 years (Year 5).

Help Rabia and Shereen calculate the total amount they will need to save:

Children University Expenses (Rs.)										
	Child	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Total**
1.	Shereen	-	-	300,000	300,000	300,000		-	-	
2.	Daniyal	-	-	-	-	300,000				
3.	**Total**	**-**	**-**	**300,000**	300,000	600,000				

The solution to this exercise can be found on page 144

SAVINGS: CALCULATING ANNUAL SAVINGS

The family will need to save Rs. 2,400,000 to send Shereen and Daniyal to university. They have 8 years to do this.

Help Rabia and Shereen complete their table, which shows how much they need to save on average each year:

Children University Expenses (Rs.)										
	Child	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Total**
1.	Shereen	-	-	300,000	300,000	300,000	300,000	-	-	1,200,000
2.	Daniyal	-	-	-	-	300,000	300,000	300,000	300,000	1,200,000
3.	**Total**	**-**	**-**	**300,000**	**300,000**	**600,000**	**600,000**	**300,000**	**300,000**	**2,400,000**
4.	Annual savings									

$$\text{Annual savings} = \frac{\text{Total savings goal}}{\text{Number of years}}$$

The solution to this exercise can be found on page 144

FINANCIAL PLANNING: BASICS OF A BUDGET

You have already been dealing with budgets.

A personal budget is an estimate of income, expenses and savings over time.

A business budget is an estimate of income, expenses and profit or loss over time.

Safdar's & Rabia's Family Budget (Rs.)				
		May	**June**	**July**
Income				
1.	Safdar's income from the fruit shop	65,000	54,000	78,100
2.	Rabia's income from teaching	20,000	20,000	20,000
3.	Profit from savings in bank	-	192	436
4.	Total income	85,000	74,192	98,536
Expenses				
5.	Rent	15,000	15,000	15,000
6.	Food & household items	12,000	14,000	11,000
7.	Electricity, water & mobile bills	8,000	7,000	9,000
8.	Transport	7,000	6,000	6,728
9.	Education	8,000	8,000	8,000
10.	Health	1,000	3,000	4,000
11.	Clothes, entertainment, gifts, etc.	11,000	15,000	14,000
12.	Total expenses	62,000	68,000	67,728
Savings				
13.	Net monthly savings	23,000	6,192	30,808
14.	Total savings	23,000	29,192	60,000

All income from different sources

budget
fixed income
variable income

All expenses from different sources

Note that some income and expenses lines are the same each month. These are called **fixed income items** or **fixed expense items.**

Note that some income and expenses lines change from month-to-month. These are called **variable income items** or **variable expense items.**

Savings for a given month

Monthly savings LESS monthly withdrawals

SAVINGS: UNDERSTANDING FAMILY BUDGETS

?

Safdar, Rabia and Shereen look at their family budget for the past three months.

Based on their family budget, on the previous page, answer the following questions:

1. What are their total savings in 3 months?

....

2. If this pattern is the same for the whole year, how much will they save in one year?

....

3. Which income line shows the most variable income? Why?

....

4. Which income is a fixed income?

....

5. Which two expenses are fixed expenses?

....

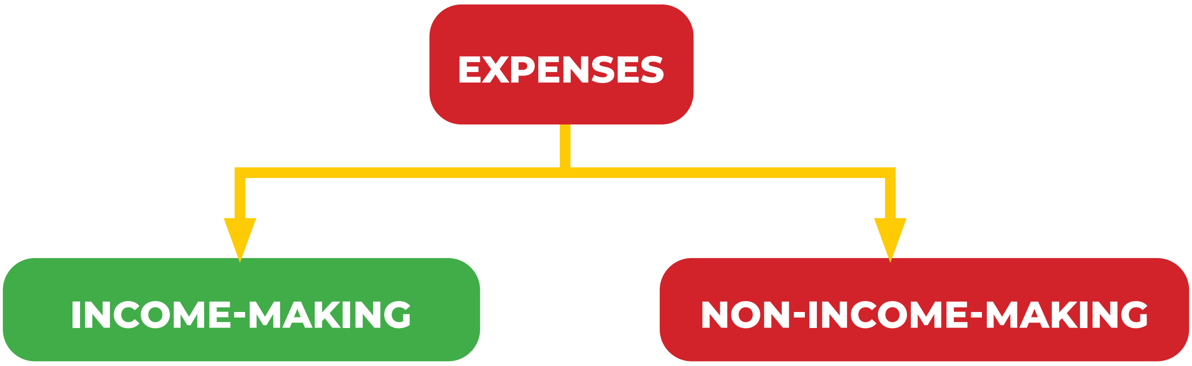
6. If they want to save more, which expense line can they reduce the easiest?

....

The solution to this exercise can be found on page 146

EXPENSES: WILL YOU MAKE MONEY?

You spend money on many things. Some of your expenses will help you make money. Other expenses will not.



Income-making expenses are expenses that help you make money.

Non-income-making expenses are expenses that do not earn you any money.

expenses
income

EXPENSES: BUYING A FRUIT TREE

For example, imagine that you spend money to grow a tree.

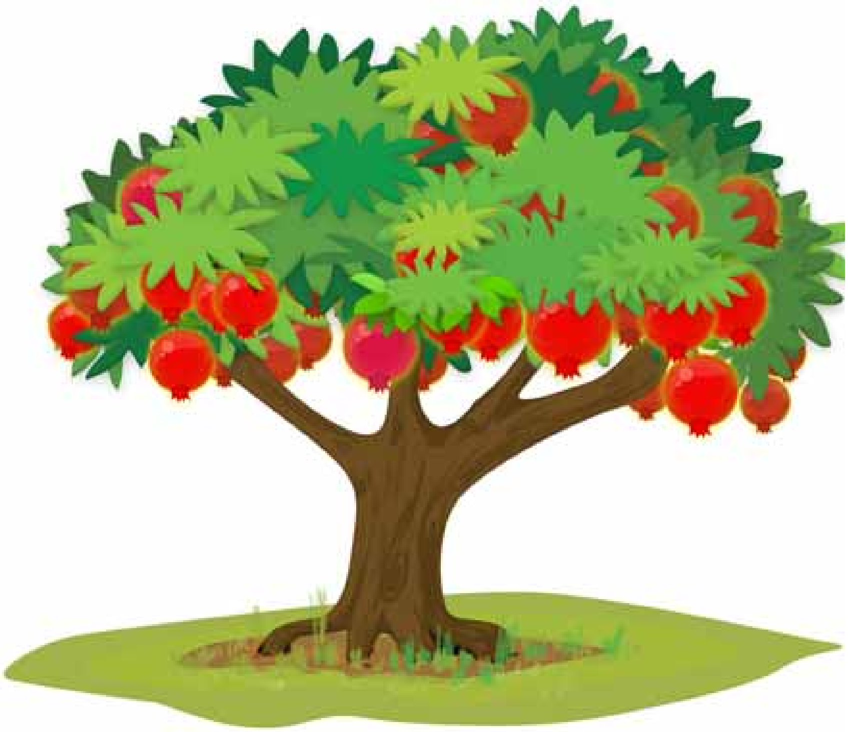
1. You could grow a fruit tree and make money by selling the fruit.
2. You could also grow a fruit tree and enjoy eating the fruit without selling any of it.
3. You could also grow a tree without edible fruit just to enjoy its beauty.

Which type of expense will be easier for most people to bear?

Most people will find it easier to spend money to grow the fruit tree if they can make money by selling the fruit. This is because it is an income-making expense.

If they sell the fruit, some of the money they spend to grow the tree will come back to them.

If they eat the fruit, they will enjoy it, but the money they spend to grow the tree will not come back to them, but they will have savings because they will buy less fruit.



? EXPENSES: WILL SHEREEN'S FAMILY MAKE MONEY?

Choose whether or not the following expenses will allow Shereen's family to earn money:

		Earns Money	Does NOT Earn Money
1.	Shereen buys a notebook for her school homework.	☐	☐
2.	Shereen spends money to print a poster that invites students to take tuitions from her.	☐	☐
3.	Ali spends money to put fertilizer on a fruit tree from which he will sell the fruit.	☐	☐
4.	Ali spends money to put fertilizer on a fruit tree from which he will eat the fruit.	☐	☐
5.	Nusrat buys a sewing machine to make clothes to sell.	☐	☐
6.	Nusrat buys a sewing machine to make clothes for Ali and herself.	☐	☐

The solution to this exercise can be found on page 146

EXPENSES: WILL YOU MAKE MONEY?

?

List some of your, your family members' or your friends' expenses.

Can you tell if these expenses earn money or don't earn money?

	Earns Money	Does NOT Earn Money
1.		
2.		
3.		
4.		

EXPENSES: NECESSARY AND UNNECESSARY

You can have two kinds of expenses. You can have necessary expenses and you can have unnecessary expenses.

EXPENSES

NECESSARY (FOR NEEDS)

UNNECESSARY (FOR WANTS)

Some things are very important and you must have them. Having these things meets human **needs**. For example, going to school and eating lunch are both needs. Expenses that meet needs are **necessary expenses**.

Some things are not important, but make you happy so you want to have them. They are called **wants**. For example, buying a new toy and eating ice cream are both wants. Expenses that meet wants are **unnecessary expenses.**

If you don't have enough money, it is better to cut unnecessary expenses than necessary expenses.

necessary expenses
unnecessary expenses

EXPENSES: DEALING WITH NECESSARY AND UNNECESSARY EXPENSES

?

The family has an annual university savings goal of Rs. 300,000, but it looks like they will only save Rs. 240,000.

Safdar will work to add Rs. 30,000 more from his business, and Shereen will put in Rs. 10,000 from her fruit business.

Help Rabia reduce the family's annual expenses and save Rs. 20,000.

Safdar & Rabia's Family Expenses (Rs.)		
		Year 1
Other Expenses		
1.	Rent	180,000
2.	Food & household items	156,000
3.	Electricity, water & mobile bills	96,000
4.	Transport	78,000
5.	Education	96,000
6.	Health	24,000
7.	**Total**	**630,000**
Clothes, Entertainment, Gifts, Etc		
8.	Clothes	18,000
9.	Dining out	10,000
10.	Family travel	22,000
11.	Sweets	9,000
12.	Toys	8,000
13.	Pocket money for children	12,000
14.	Gifts for relatives	8,000
15.	Charity	8,000
16.	Cigarettes	16,000
17.	Bangles, earrings, etc.	9,000
18.	**Total**	**120,000**
19.	**Total expenses**	**750,000**

Which expenses will you cut? Which are the least necessary expenses?

The solution to this exercise can be found on page 147

EXPENSES: YOUR UNNECESSARY EXPENSES

List some of your, your family members' or your friends' expenses.

Can you tell if these expenses are necessary or unnecessary?

	Necessary	Unnecessary
1.	☐	☐
2.	☐	☐
3.	☐	☐
4.	☐	☐

SAVINGS: BANK VS. HOME

A big question you should ask yourself is if you want to save money at home or in a bank.

Saving Options

These are some questions you should ask when deciding where to save money.

Will the money be easy to get when I want to spend it?

Will the money make an income?

Will the money be easy to transfer?

Will the money be safe from theft or natural disasters?

SAVINGS: BANK VS. HOME

Help Shereen decide whether saving at home or in a bank is better.

	At Home	In a Bank
1. Safety		
2. Makes money		
3. Easy to transfer money to another city		
4. Easy to get to money		
Where should she save her money?		

transfer

The solution to this exercise can be found on page 147

SAVINGS: BANK VS. HOME

The benefits of saving money in a bank:

1. Your money earns an income

The mark-up rate offered by banks on a savings account allows you to earn an income on your deposited savings. For example, if you deposit Rs. 100 in a savings account with an annual mark-up rate of 10%, you will earn an income of Rs. 10 in the coming year.

2. Your money is safe

Banks spend a lot of money on making sure that their operations and computer systems are safe. Your savings are much more secure from theft and natural disasters when deposited in a bank.

3. Your money is easy to transfer

It is easy to transfer money from one person to another by using bank accounts. Mobile and branchless banking have also made everyday banking tasks like funds transfer and bill payment much more convenient to perform.

4. Your money is easy to get to if you want to spend it

It is easier to get to your money if you save it at home, but this means leaving the house with a lot of money in your pocket every time. Having a bank account allows you the convenience to use a debit card to withdraw money from an ATM or pay a seller directly through your current account. With the increasing usage of mobile payments and banking, and more retailers accepting e-payment transfers, accessing your money and making a purchase has become easier than ever.

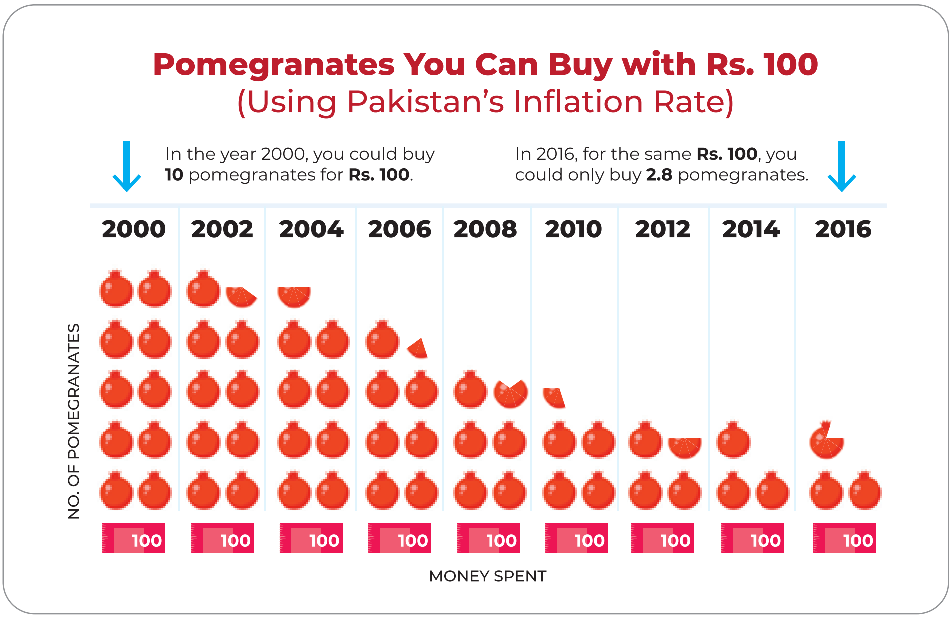
In summary

Banks keep your money **safe**, they make it **easy for you to make transfers** and payments, they **pay you** for every rupee you keep in a savings account and they allow you **convenient access** to your money through ATMs and mobile banking.

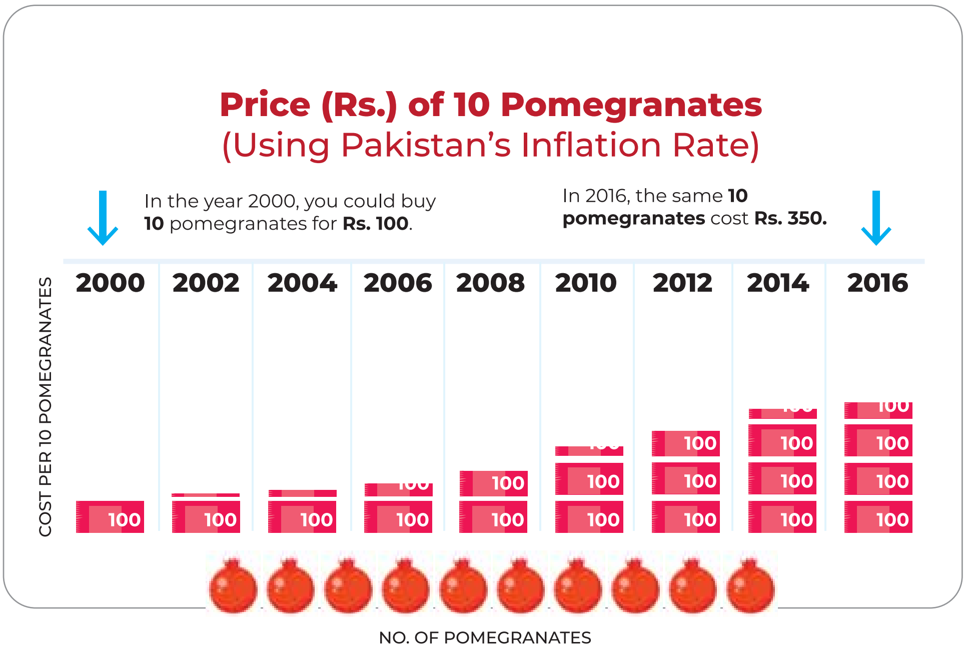
debit card	funds transfer
withdraw	savings account
ATM	deposit
mobile banking	

INFLATION: AN INTRODUCTION

Inflation is the steady increase in prices of goods and services over time. The inflation rate is the rate at which the price of a basket of commodities goes up each year. Usually, in Pakistan, prices (and inflation) go up every year. This means that, using Pakistan's inflation rate, if Rs. 100 bought you 10 pomegranates in the year 2000, Rs. 100 will buy you about 2.8 pomegranates in the year 2016.



It also means that, using Pakistan's inflation rate, if you bought 10 pomegranates for Rs. 100 in the year 2000, you would pay about Rs. 350 for the same 10 pomegranates in 2016.



Because inflation is related to a rise in prices, you need to think about how much income you will need to earn and what you will need to spend every year as prices rise.

INFLATION: THINKING ABOUT INFLATION

?

Inflation relates to rises in prices.

Separate the true and false statements below.

	Statement	True	False
1.	Rabia has a fixed salary of Rs. 20,000 per month. If there is inflation, she will be able to buy more things with that salary.		
2.	Shereen can buy a book for Rs. 200 today. If there is inflation, the same book will cost more in the future.		
3.	Shereen wants to save money to buy a book in 1 year. The book costs Rs. 200 today. If there is 10% inflation of the price of the book every year, she will need to save Rs. 220.		
4.	Safdar increases the sale price of his fruits at the rate of inflation every year. This means the income from his shop will go down every year.		

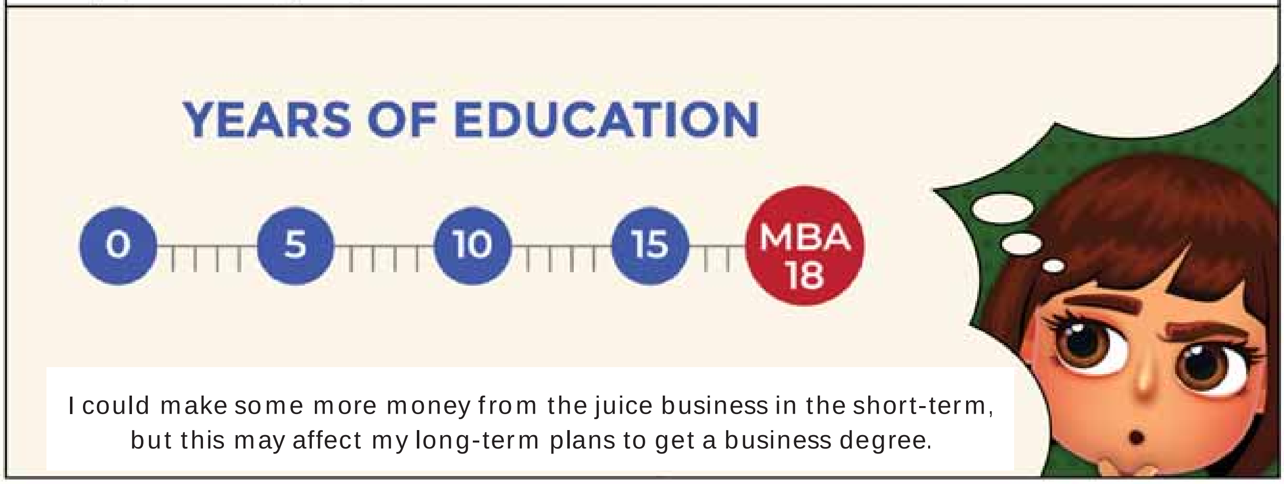
basket of commodities

The solution to this exercise can be found on page 148

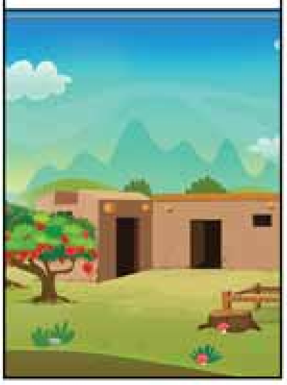
FROM FRUIT TO JUICE

Shereen and Ali have invested in a juice maker and their business has been doing well. Last week, she helped her mother and father put together a savings plan for university expenses for her and her brother.

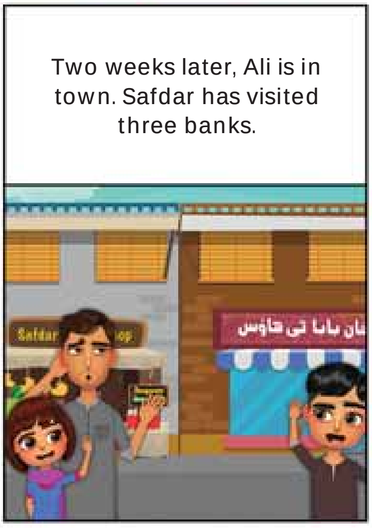
She starts thinking about the importance of university and how much effort it will take her parents to pay for the university expenses.

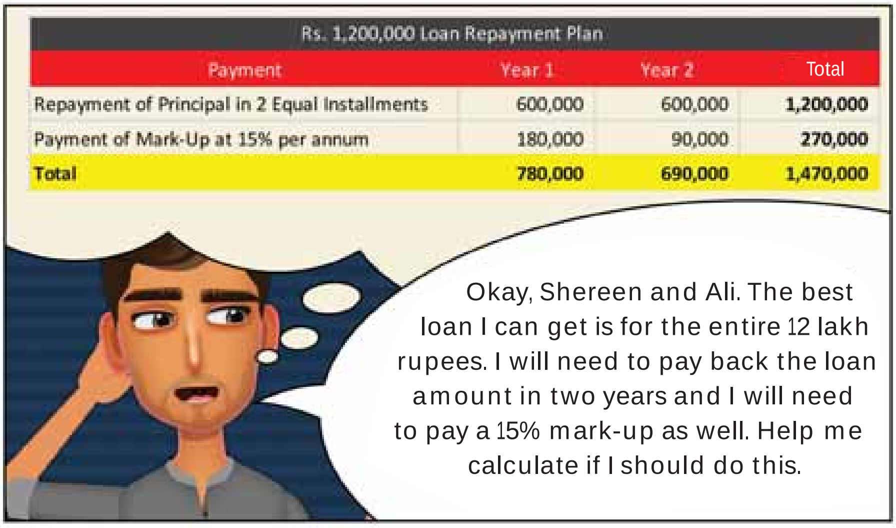


That weekend, Shereen and her family travel to the village and she speaks to Ali.




Ali, we are thinking alike! Abba wants to expand his business and start selling fruit juice. We can help him without taking up too much time!
That is a good idea! That way, we can do well in our studies and also learn a little more about business in our spare time.
Next week, Shereen asks Safdar if she can help him grow the business.
Safdar's Fruit Shop
Yes, beta. That will be most welcome. I know you are interested in business studies and this will also be a good way for you to learn.
You see, all costs are rising. Even if I grow my fruit business and sell more fruit each year, I may make only the same amount of money or even less in the next few years.
Safdar's Fruit Shop Budget (Rs.)
Income, Expenses and Profit | Year 1 | Year 2 | Year 3
WITHOUT JUICE BUSINESS
Income | 6,875,000 | 7,507,500 | 8,186,063
Expenses | 6,075,000 | 6,732,610 | 7,412,890
Profit | 800,000 | 774,890 | 773,173
Rs. 200 Per kg
Rs. 400 Per kg
But Abba, if you sell pomegranate juice, you can make 400 rupees per kg instead of 200 rupees.





Rs. 1,200,000 Loan Repayment Plan

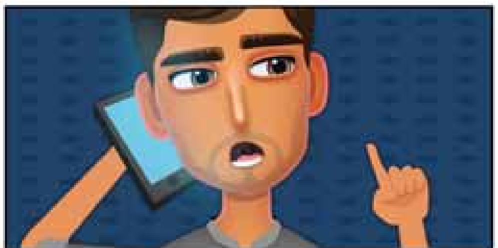
Payment	Year 1	Year 2	Total
Repayment of Principal in 2 Equal Installments	600,000	600,000	1,200,000
Payment of Mark-Up at 15% per annum	180,000	90,000	270,000
Total	780,000	690,000	1,470,000

Shereen and Ali help Safdar work out a budget of how the business will do over 3 years if they start selling juice.

Safdar's Fruit Shop Budget (Rs.)

Income, Expenses and Profit	Year 1	Year 2	Year 3
WITHOUT JUICE BUSINESS			
Income	6,875,000	7,507,500	8,186,063
Expenses	6,075,000	6,732,610	7,412,890
Profit	**800,000**	**774,890**	**773,173**
WITH JUICE BUSINESS			
Income	10,875,000	12,547,500	14,346,063
Expenses	10,220,000	11,530,000	12,534,400
Profit	**655,000**	**1,017,500**	**1,811,663**

After completing terms to buy the equipment, Safdar realizes that the seller has mistakenly not added in the cost of transport (Rs. 50,000).



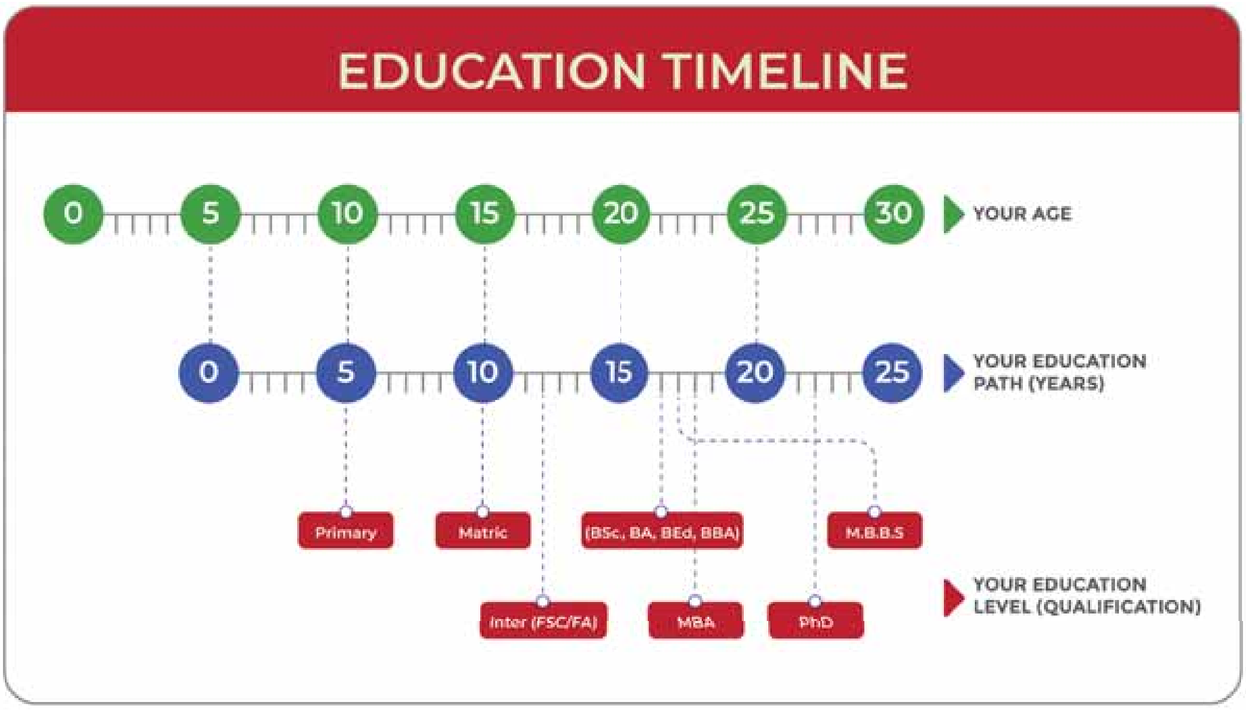
Safdar calls the seller and tells him about the mistake. The seller is so grateful, he sticks to the final price.

On the opening day of the juice business, Safdar gives the first two bottles of juice to Shereen and Ali.

FROM FRUIT TO JUICE
WORKBOOK

FINANCIAL PLANNING: EDUCATION GOALS

When Shereen and Ali realize how much money their parents need to save to help them go to university, they decide to not grow their fruit business and instead focus on their studies.



For many families, their largest investment is buying a family home. Their most expensive investment after that is paying for their children's education.

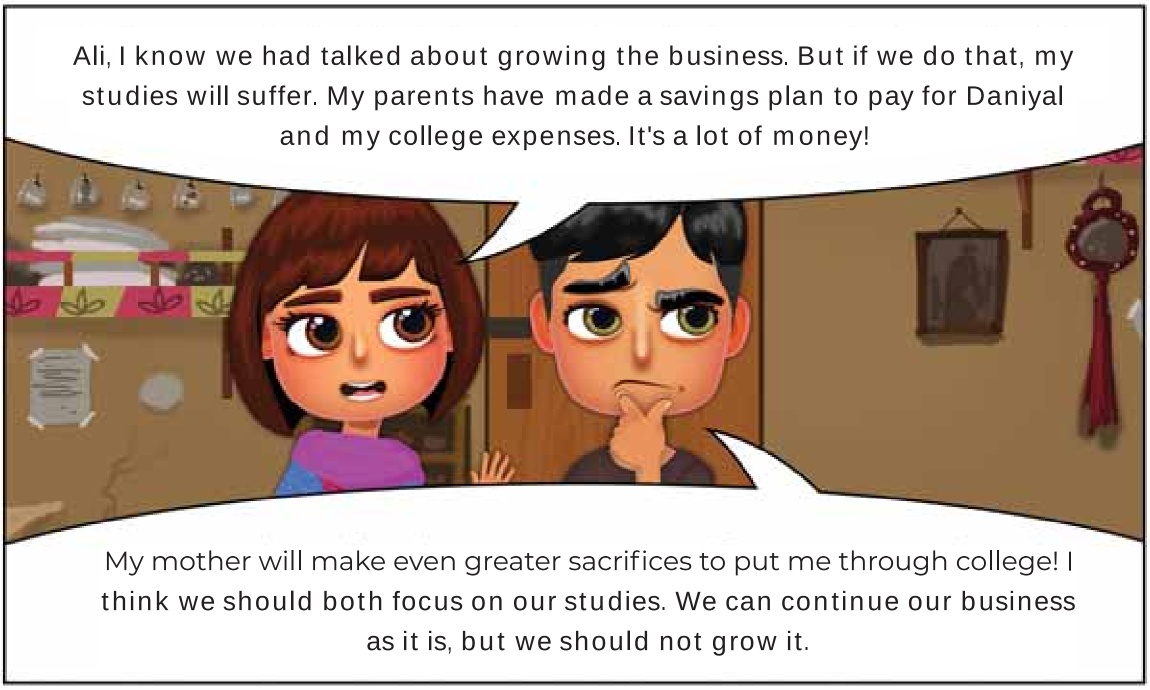
While parents invest money in their children's education, the children themselves invest in their education through focus and effort.

Daniyal wants to become a doctor. To get his doctor's degree (Bachelor of Medicine and Bachelor of Surgery (MBBS)), he will need to study for about a total of 17 years.

Shereen and Ali are interested in a career in business. While people can sometimes succeed in business with just some education, these days young people who are starting off their business career obtain an advanced business degree (Master of Business Administration (MBA)). To get their MBA degrees, Shereen and Ali will need to study for about a total of 18 years.

FINANCIAL PLANNING: EDUCATION GOALS

When Shereen and Ali realize how much money their parents need to save to help them go to university, they decide to not grow their fruit business and instead focus on their studies.



1. Did Shereen and Ali make the right decision? Should they instead have focused on making more money to help their parents save for university?

2. Is getting a higher education (university and beyond) becoming more important to succeed in life? If so, why?

3. Is a higher education (university and beyond) only important if you want to make a lot of money?

The solution to this exercise can be found on page 149

PURCHASING: SMART BUYING

There are three major steps to becoming a smart buyer:

Things to check before buying something:

1. It's a good idea to get prices and terms from more than one seller.
2. It's a good idea to get all the information you need;
    a. **Price** – what price the seller is offering.
    b. **Quantity** – the amount of the product you want to buy.
    c. **Quality** – the quality of the product you are looking for.
    d. **Terms** – all the conditions attached to the purchase.
3. Negotiate with sellers to lower price and improve quality and terms.

terms
negotiate

PURCHASING: SMART BUYING TERMS

It is important to check the seller's terms before buying something.

Terms to check before buying something:

1. When is the payment for the purchase due? Can you pay now or later?
2. When will the product be ready?
3. Do you need to pick it up or will it be delivered?
4. Will you get your money back if the product is faulty or damaged?

PURCHASING: SMART BUYING

Before buying the juice makers and machinery, Safdar checks with three sellers. Before taking a bank loan, he checks with three banks. He is a smart buyer.

Can you tell what each statement or question is about?

	Statement	Quality	Quantity	Price	Terms
1.	"If we lend you money, you will need to pay it back in two years."				
2.	"I will sell this equipment to you for Rs. 12 lakhs."				
3.	"If the equipment does not work, we will fix it for free."				
4.	"I want the best functioning equipment."				
5.	"May I pay for the equipment 30 days after you deliver it?"				
6.	"I want 4 juice makers."				
7.	"We will deliver the equipment to your shop."				

The solution to this exercise can be found on page 150

PURCHASING: ARE YOU A SMART BUYER?

Figure out what kind of a buyer you are by answering these questions.

		True	False
1.	I get prices from more than one seller.		
2.	I check the quantity of what I am buying.		
3.	I check the quality of what I am buying.		
4.	I check when I need to make a payment.		
5.	I check if I can get my money back if the product I buy is faulty.		

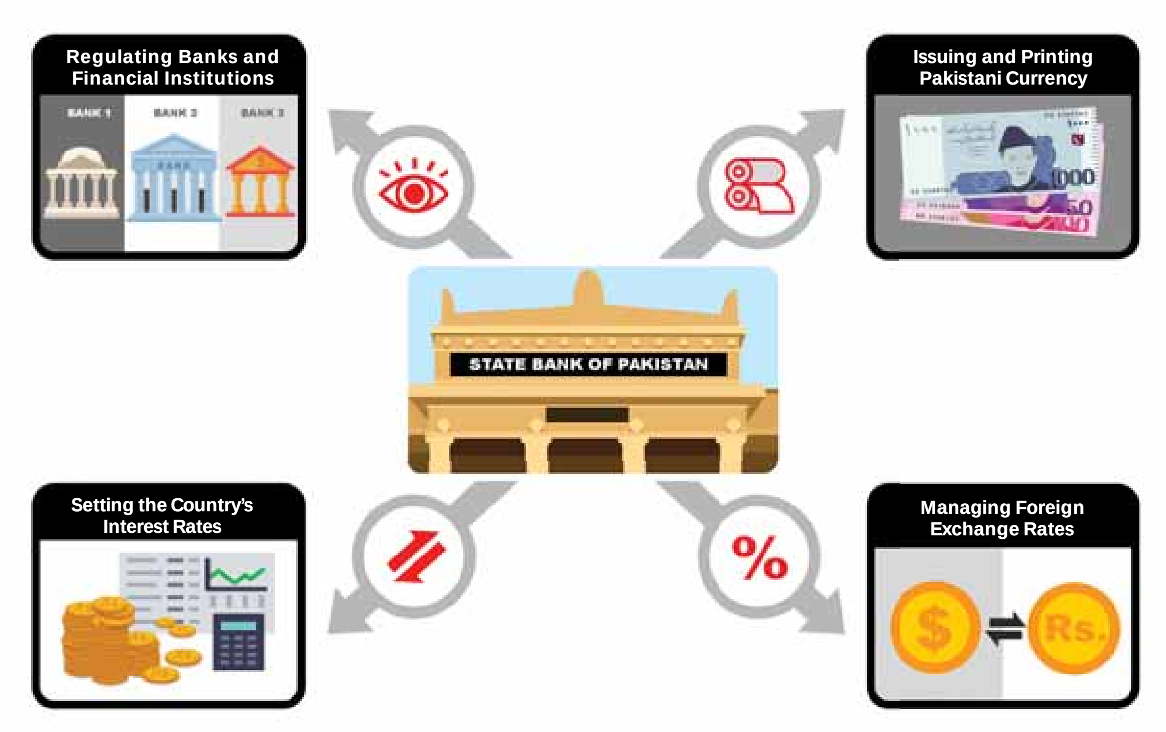
Total true check marks

Type of Buyer	No. of true check marks
Very smart buyer	5
Smart buyer	4
Average Buyer	3
Careless buyer	0-2

If you got 4 or more true check marks, you are a smart buyer!

BANKING: THE STATE BANK OF PAKISTAN

The State Bank of Pakistan is the central bank of the country. It plays a vital role in the country's economy.



Roles of the State Bank of Pakistan

Managing money supply and issuing currency: The State Bank issues Pakistan's currency and controls the amount of currency in circulation. It uses its control of money to try and keep prices stable to manage inflation, and to make borrowing and saving easier to promote growth.

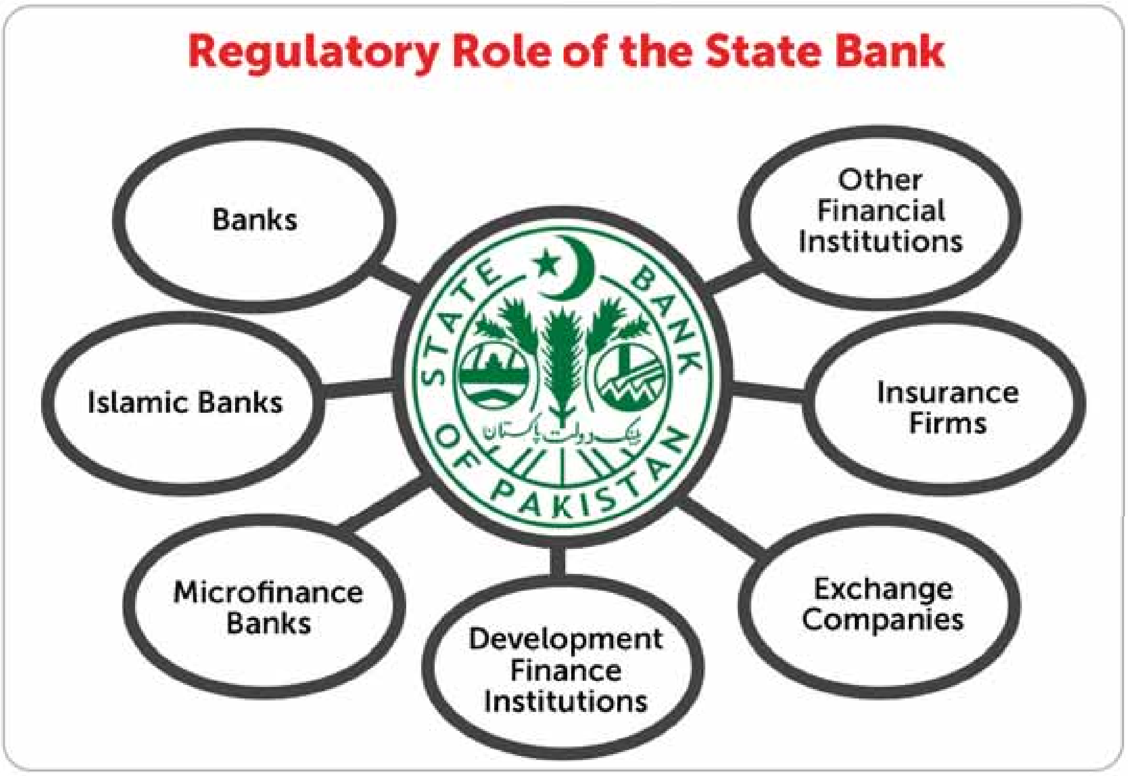
Regulating the financial sector and protecting consumer rights: The State Bank regulates and supervises banks and other financial firms to make sure that they are managed soundly and that the rights of consumers who deal with them are protected.

Managing foreign exchange reserves and the rupee exchange rate: The State Bank manages and invests Pakistan's foreign currency reserves. It also manages the exchange rate between the Pakistani Rupee and other foreign currencies.

Setting mark-up rates and promoting economic development in Pakistan: The State Bank uses it role as the central bank and as the supervisor of the private sector to promote economic development in Pakistan. It also determines the mark-up rate for borrowing and saving.

BANKING: THE STATE BANK OF PAKISTAN

In most countries, the banking system is supervised by the central bank. Similarly, in Pakistan, the State Bank of Pakistan, the country's central bank, regulates banks and other financial institutions.



The State Bank of Pakistan regulates banks and other financial institutions to make sure:

Soundly managed banks: Banks and other financial institutions are soundly managed.

Consumer protection: Customer deposits are secure and their rights are protected.

Fair rates for services: Bank service charges to customers are fair and reasonable.

Fair savings rates: Banks provide fair and reasonable savings rates to customers.

Fair lending practices: Banks make loans to customers on a fair and reasonable basis.

BANKING: STATE BANK CONSUMER RIGHTS

When you open an account, make a deposit with or take a loan from a bank, you become a consumer or customer of banking services. A bank is more powerful than its customers. This makes it easy for a bank to treat its customers unfairly. To protect customers and their money, the State Bank of Pakistan makes sure that banks respect consumer rights.

Guaranteed deposit protection: The State Bank protects a depositor's money in case a bank closes. The State Bank guarantees that all or part of the money in a deposit will be paid back to the depositor.

Rates for services: The State Bank requires banks to charge customers fair and reasonable service charges.

Savings rates: The State Bank requires banks to provide their customers with a minimum profit rate on savings accounts.

Borrowing rates: The State Bank requires banks to lend money to their customers at fair and reasonable rates.

Right to loan collection: The State Bank requires financial institutions to follow strict guidelines in their loan collection efforts. This includes giving borrowers enough time to repay their loans.

Right to information: You have the right to access information regarding your financial activities from banks. Banks are also required to protect your personal information.

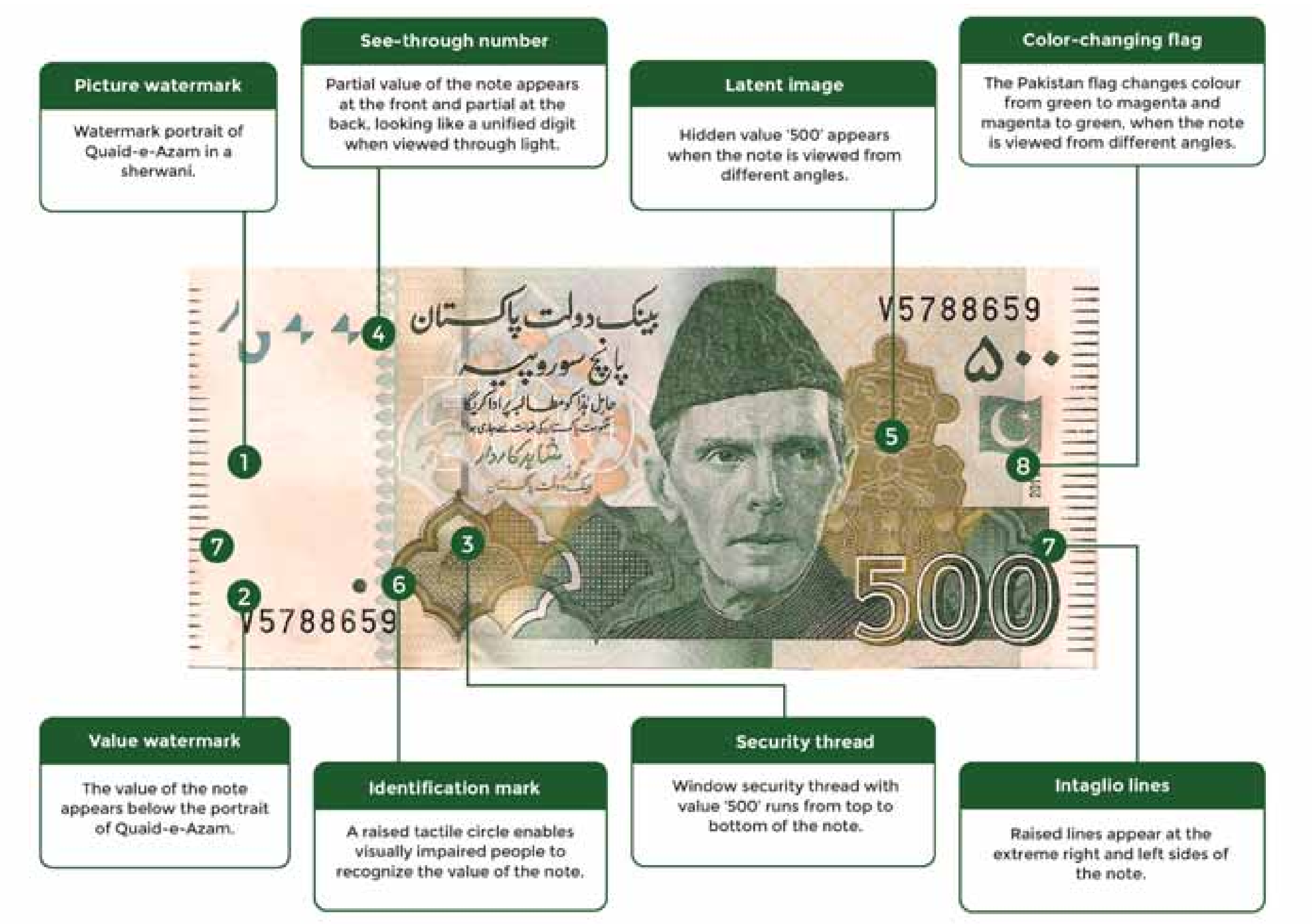
Right to complain and be heard: The State Bank requires banks to follow guidelines in handling customer complaints.

BANKING: CURRENCY FRAUD

The State Bank of Pakistan prints all the money (notes and coins) in the country. The Pakistan Rupee has 7 paper currency denominations: 10, 20, 50, 100, 500, 1,000 and 5,000. Every few years, the State Bank issues new versions of each bank note.

Only the State Bank has the right to issue currency. But criminals often print fake, or counterfeit, notes. If you get a fake note, it has no value. And giving others a fake note could be a crime. So, you need to learn how to tell real currency issued by the State Bank from fake notes printed by criminals.

Here are some security features to look out for when you receive a Rs. 500 bank note:

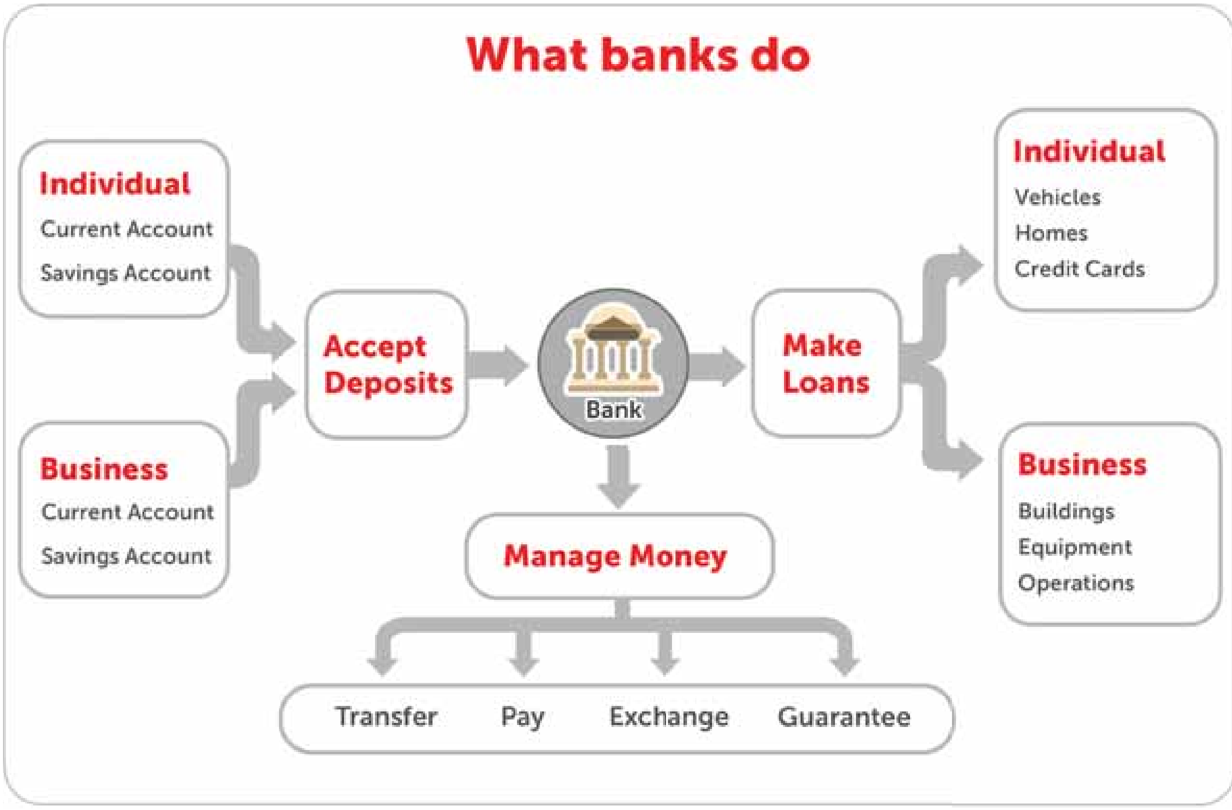


To find more information regarding security features of other bank notes, go to: http://www.sbp.org.pk/BankNotes/banknotes.htm

counterfeit

BANKING: WHAT BANKS DO

Banks provide many services for their customers. Three main services are (1) accepting deposits, (2) making loans and (3) managing money.



Accept deposits: Banks accept cash deposits from their customers and keep the money safe in customer accounts. Two main types of customer accounts for deposits are:

- Current accounts: These are accounts in which customers can freely deposit and withdraw money. Usually, customers do not earn a profit or mark-up on the money in deposit in current accounts.
- Savings accounts: These are accounts in which customers deposit money for a specified time period. Customers earn a profit or mark-up on the money deposited in savings accounts.

Make loans: Banks make loans to individuals and businesses.

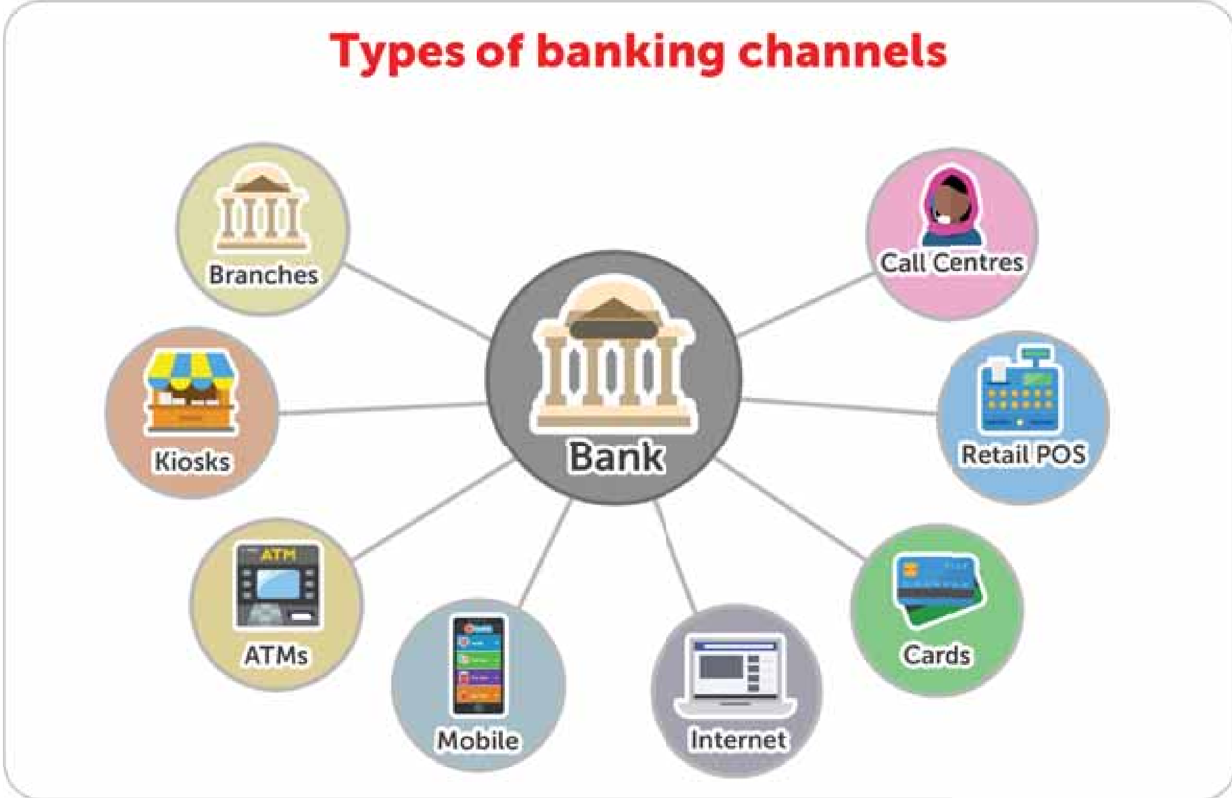
- Individual loans: Banks make loans to individuals so they have money to buy or build a home or buy a vehicle or use for other purposes. When banks issue a credit card, they make a loan to the user each time that the user uses the credit card to make a payment.
- Business loans: Banks make loans to businesses that enable them to buy or develop land, or buildings, or buy equipment, or use for other business purposes.

Manage money: Banks manage money for individuals and businesses.

- Transfer: Banks help customers transfer money including through mobile banking.
- Pay: Banks help customers make payments including through mobile banking and credit and debit cards.
- Exchange: Banks help customers exchange money in one currency for money in another currency.
- Guarantee: Banks issue guarantees of payment for business customers to help them grow their businesses.

BANKING: TYPES OF BANKING

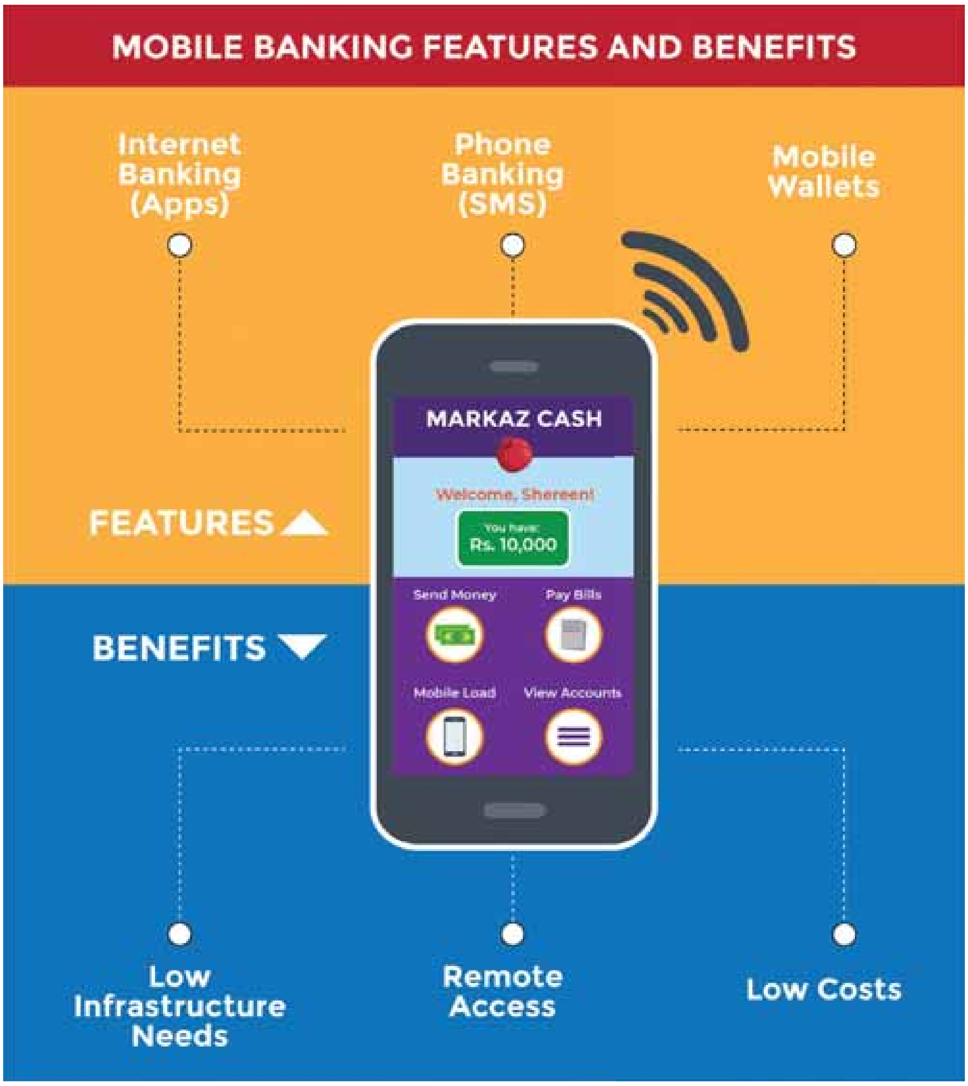
A bank will reach its customers and provide them with services through many channels or pathways.



- **Branches:** Bank branches are physical centers that customers can visit to arrange loans, make deposits and manage money. They are staffed by bank representatives.
- **Kiosks:** Bank kiosks are small physical bank booths (usually in shopping centers and transport hubs) which customers can visit to make withdrawals and manage money. They are staffed by bank representatives.
- **ATMs:** Automated Teller Machines (ATMs) are machines which customers can visit to make withdrawals and manage money. They are NOT staffed by bank representatives. Usually, customers may visit them 24x7.
- **Mobile and Internet Banking:** Banks provide mobile apps and Internet banking websites. Customers can use their mobile phones, laptops and tablets to access their bank and arrange loans, make deposits and manage money.
- **Cards:** Banks issue plastic cards to their customers which may be used to make payments. Credit cards enable customers to make payments by borrowing money from the bank. Debit cards enable customers to make payments by withdrawing money they have deposited with the bank.
- **Retail POS:** Banks provide retail Point of Sale (POS) systems to shops, restaurants and other retailers. The retailers use these systems to charge money to customers who have bank cards or other bank payment systems. In this way, retailers and customers do not need to collect and pay cash.
- **Call Centers:** Banks operate customer call centers that customers may call to make deposits and manage money. They are staffed by bank representatives.

BANKING: MOBILE BANKING

Mobile banking offers customers many advantages.



With mobile banking you can use your mobile phone to perform basic banking activities such as:

1. Check account details,
2. Pay utility or mobile bills,
3. Transfer money between your accounts or to others, and
4. Find your nearest bank branch or ATM.

Mobile banking allows customers and service providers the ability to conduct transactions without the need for a physical branch. This allows banks to charge a lower rate from mobile banking customers.

BANKING: KNOWING THE STATE BANK

Figure out how much you know by answering these questions.

		True	False
1.	The State Bank issues Pakistan's currency (rupees).		
2.	The State Bank loans money to businesses and individuals.		
3.	The State Bank manages Pakistan's foreign currency reserves.		
4.	The State Bank sets electricity and gas prices in Pakistan.		
5.	The State Bank owns all the banks in Pakistan.		
6.	The State Bank regulates all the banks in Pakistan.		

The solution to this exercise can be found on page 151

BORROWING: INSTALLMENTS AND **MARK-UP**

Fruit Business Only (Rs.)				
		Year 1	**Year 2**	**Year 3**
Income				
1.	Total fruit income	6,875,000	7,507,500	8,186,063
2.	Total income	6,875,000	7,507,500	8,186,063
Expenses				
3.	Total fruit expense	5,600,000	6,203,610	6,822,490
4.	Rent	240,000	264,000	290,400
5.	Electricity, gas & other expenses	235,000	265,000	300,000
6.	Juice bottles and packaging	-	-	-
7.	Loan payments	-	-	-
8.	Total expenses	6,075,000	6,732,610	7,412,890
Profit/Loss				
9.	Profit	800,000	774,890	773,173

Two problems:

- Safdar uses almost all the profit from the business for family expenses (Rs. 800,000 / 12 = 66,667).
- Profits are slowly coming down every year.

He doesn't have Rs. 1,200,000 to buy the juice equipment!

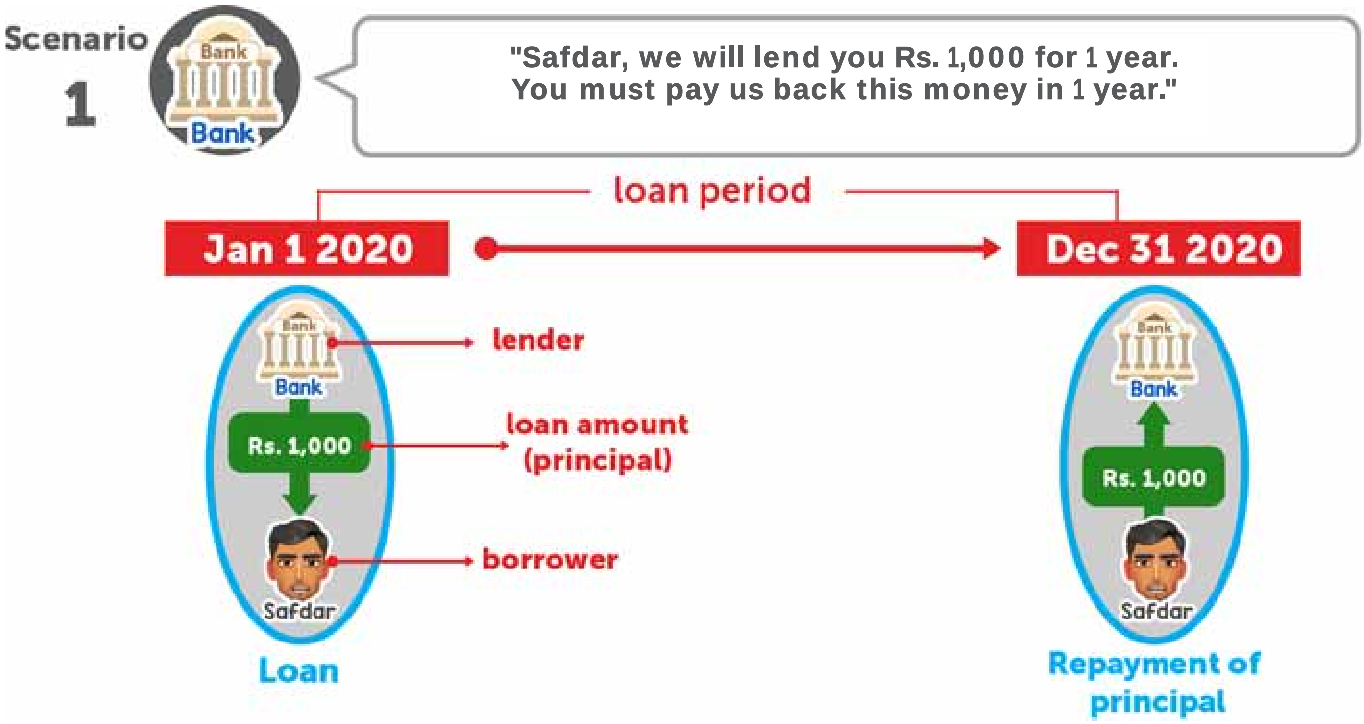
What should he do?

Safdar has three options:

1. Save profits over time: He can save the profits from the business, but this will take time. Also, he uses the profits to pay for family expenses and, if he saves the profit, his family will suffer.
2. Bring in investment into the business: He can try to bring an investor into the business who will put in the money needed for the equipment. But the business is small and is not attractive to investors at this stage.
3. Borrow money to purchase the equipment: Borrowing money will help him buy the equipment soon, and use the extra income from juice sales to pay back the money he borrows.

BORROWING: BASIC CONCEPTS

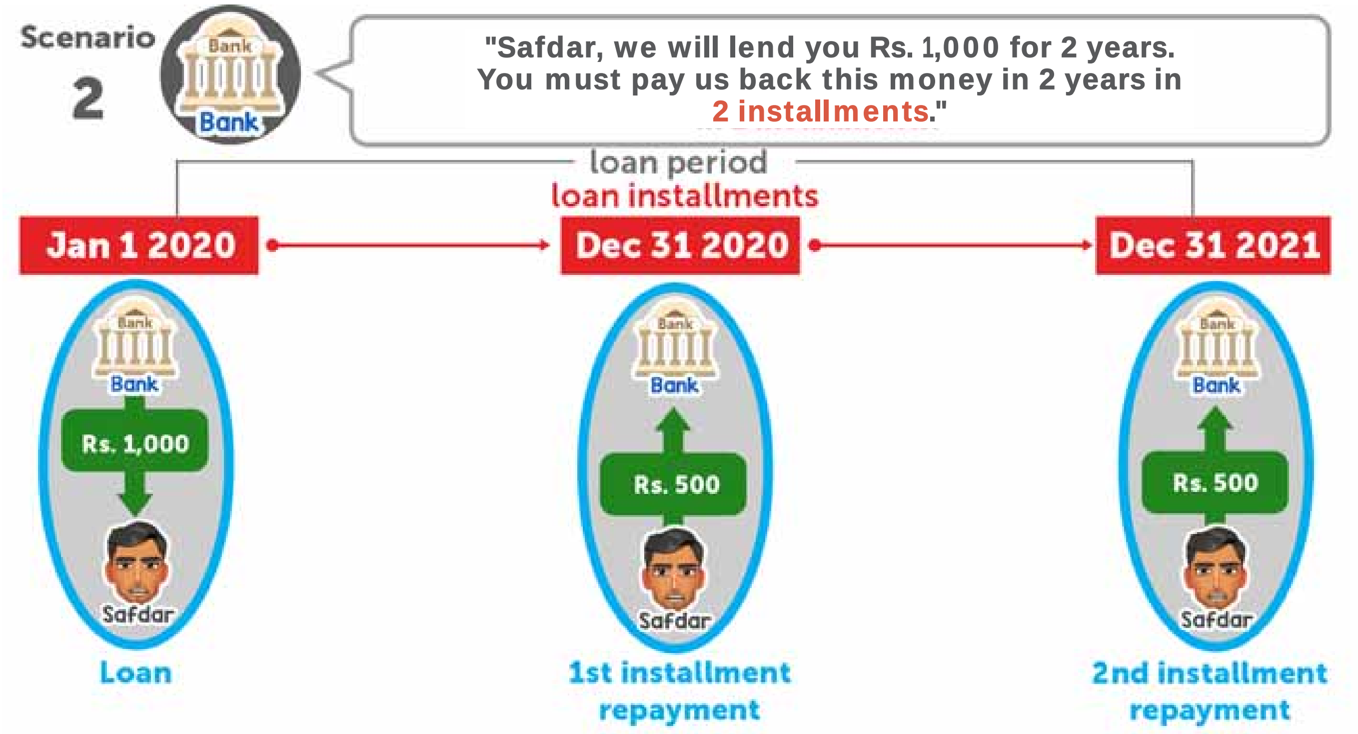
Borrowing involves a loan of money by a lender to a borrower for a specified period. The borrower must return that money in the specified period.



Important Terms	
Lender	The person who lends the money and must be repaid.
Borrower	The person who borrows the money and must repay it.
Loan	The act of giving money by a lender to a borrower that must be repaid in a specified time.
Loan amount (principal)	The amount of money lent.
Loan period	The period at the end of which the borrower must repay the loan.
Loan repayment	The paying back by the borrower of the loan amount (or principal).
Outstanding principal amount	The original principal or loan amount LESS the amount that has already been paid back.

BORROWING: REPAYMENT IN INSTALLMENTS

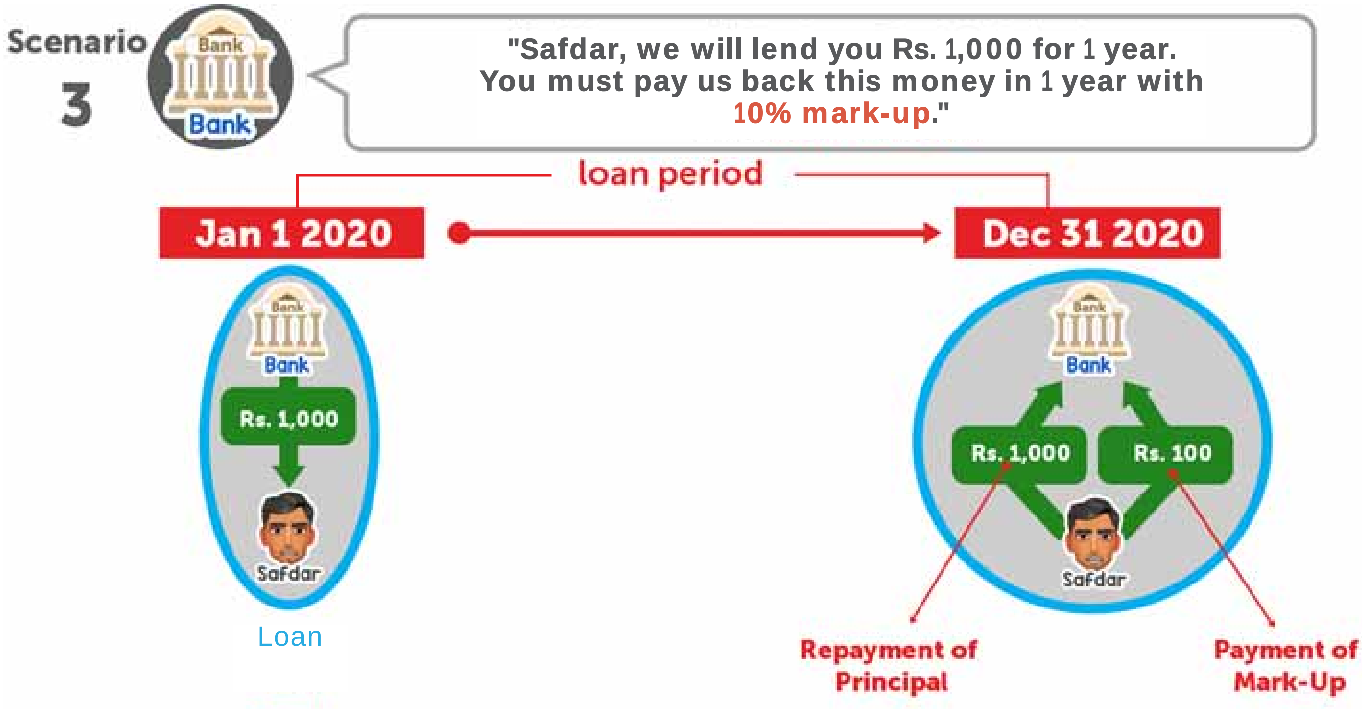
Depending on the agreement between the lender and the borrower, the loan amount must be repaid either at one time or in smaller amounts over a specified time (installments).



1. Sometimes a lender will want the entire loan amount (principal) repaid altogether at the end of the loan period.
2. Other times, a lender may agree that the loan amount (principal) is paid in small amounts over specified times (installments).
3. When the loan amount (principal) is required to be paid in installments, the sum of the amounts paid in installments is equal to the entire loan amount (principal).

BORROWING: PAYMENT OF MARK-UP

In most business loans, the lender will want the borrower to repay the loan amount (principal) PLUS a 'mark-up' or interest on the loan amount.



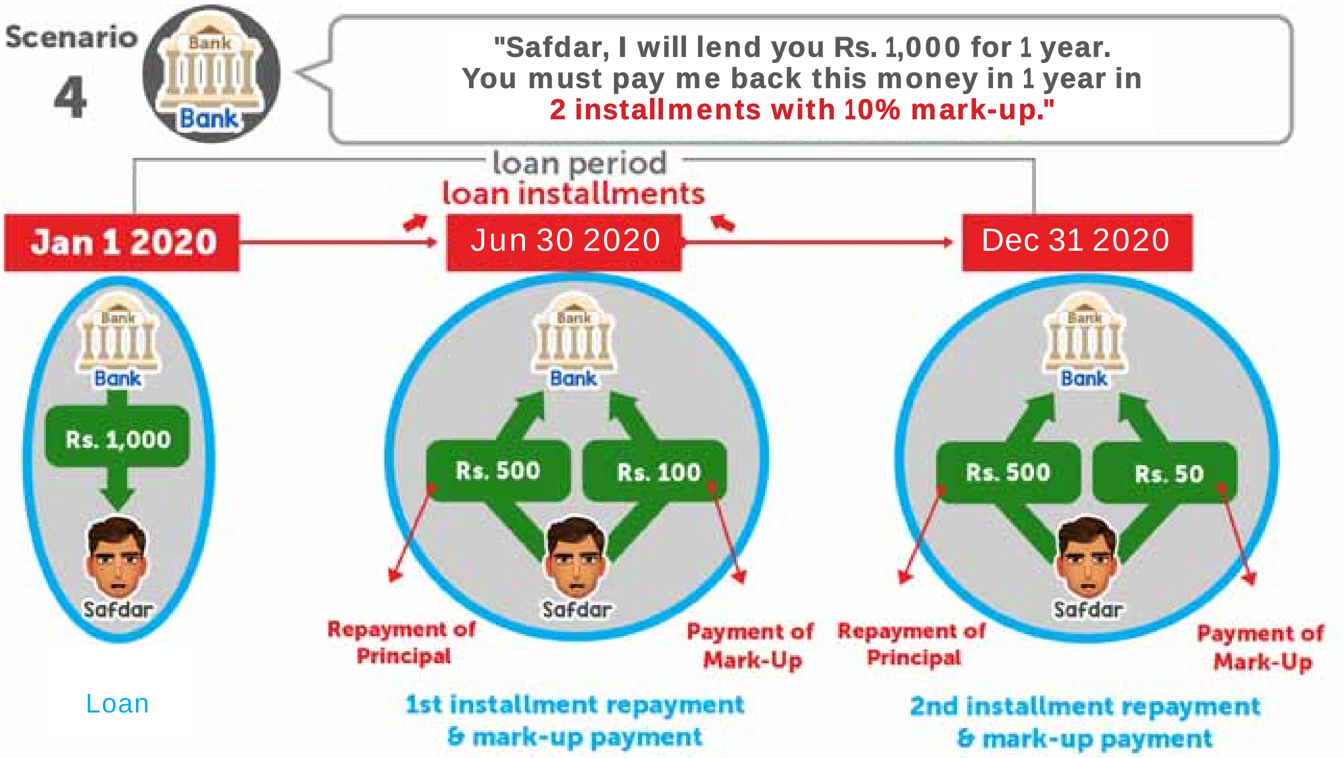
The mark-up or interest on the loan amount is expressed as a percentage of the loan amount, payable over a period.

For example, if a lender gives Rs. 1,000 for one year with a mark-up of 10% per annum, the borrower will, after one year, need to:

1. Repay the loan amount of Rs. 1000 PLUS
2. Pay 10% mark-up of the loan amount (principal) (i.e., Rs. 100).

BORROWING: INSTALLMENTS **AND MARK-UP**

In most business loans, the lender will want the borrower to repay the loan amount (principal) PLUS a 'mark-up' or interest on the loan amount and will allow the loan amount to be paid in installments.



Typically, in such loans if the loan is to be paid in two installments:

1. In the first installment, the borrower will (1) repay the portion of the loan amount to be paid in this installment and (2) all mark-up that is payable to the date of payment.
2. In the second installment, the borrower will (1) repay the portion of the loan amount to be paid in this installment and (2) all mark-up that is payable to the date of payment.

In our example:

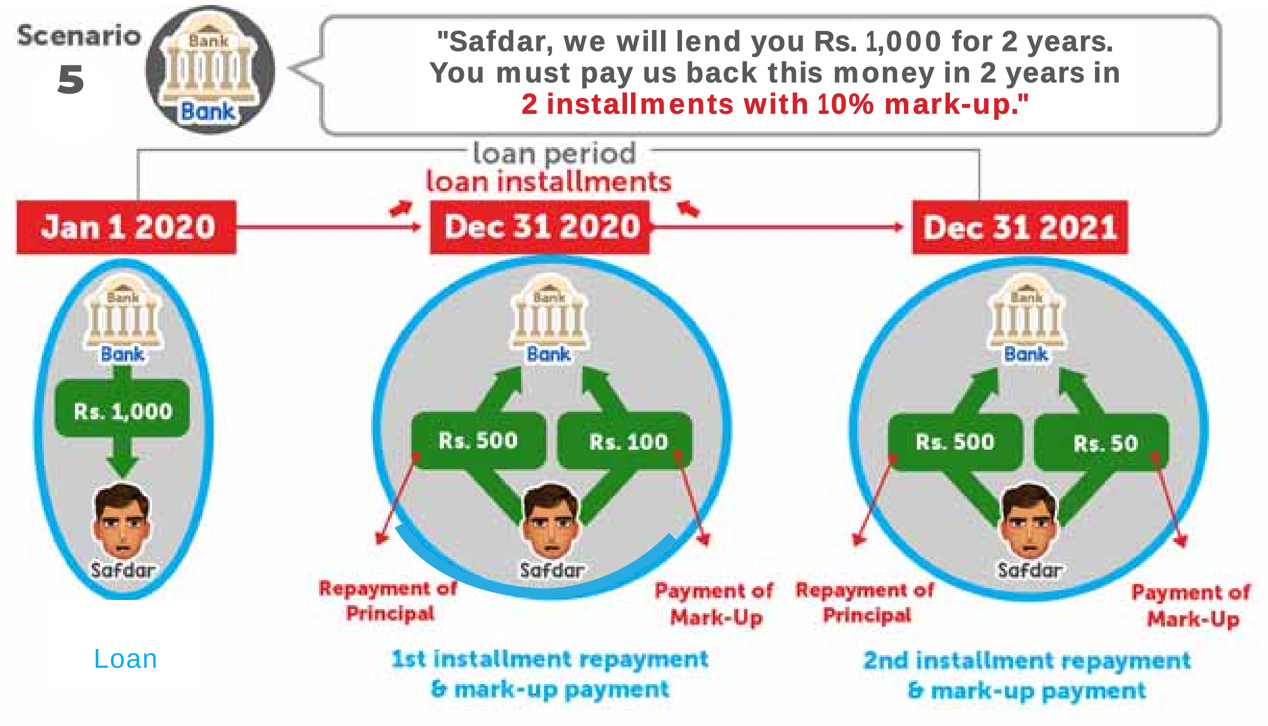
Loan Payable in 2 Installments with Mark-Up (Rs.)

1.	Date of loan	January 1, 2020		
2.	Loan amount	1,000		
3.	Loan period	1 year		
4.	Mark-up per annum	10%		
	Installment date	June 30, 2020	December 31, 2020	**Total**
5.	Principal repayment	500	500	**1,000**
6.	Mark-Up payment	50	25	**75**
7.	**Total**	**550**	**525**	**1,075**

This mark-up is on half year (0.5): Rs. 1000 x 10% x 0.5 = 50

This mark-up is on half year (0.5): Rs. 500 x 10% x 0.5 = 25

BORROWING: INSTALLMENTS **AND MARK-UP**



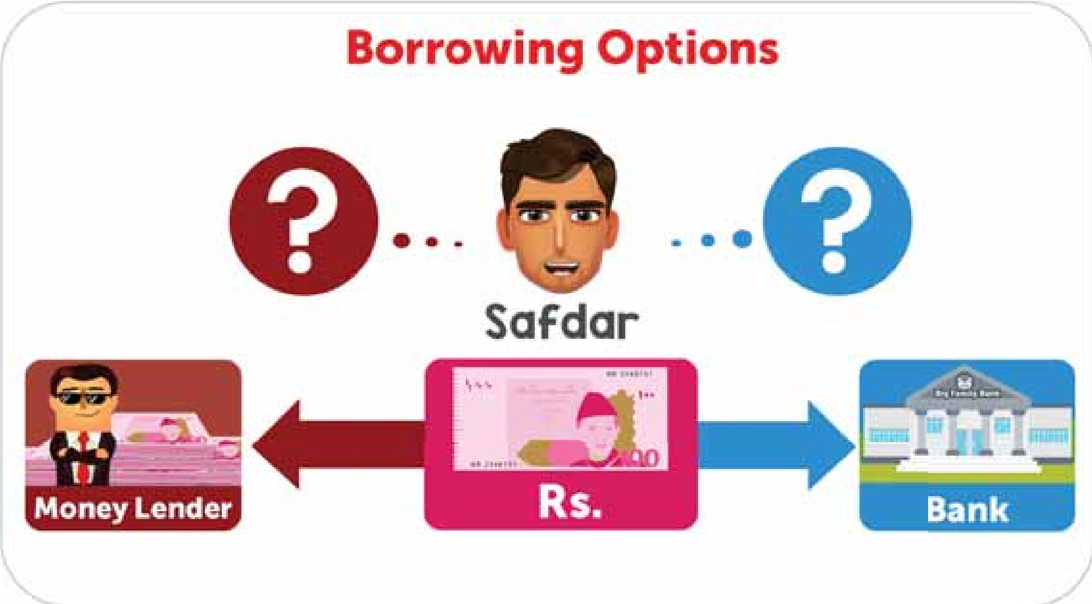
Loan Payable in 2 Installments with Mark-Up (Rs.)				
1.	Date of loan	January 1, 2020		
2.	Loan amount	1,000		
3.	Loan period	2 years		
4.	Mark-up per annum	10%		
	Installment date	December 31, 2020	December 31, 2021	**Total**
5.	Principal repayment	500	500	**1,000**
6.	Mark-Up payment	100	50	**150**
7.	**Total**	**600**	**550**	**1,150**
Calculating Annual Mark-Up (Rs.)				
8.	Loan at beginning	1,000	500	
9.	Mark-Up per annum	10%	10%	
10.	Mark-Up payment	100	50	150

Typically, in such loans, if the loan is to be paid in two installments:

1. In the first installment, the borrower will (1) repay the portion of the loan amount to be paid in this installment and (2) all mark-up that is payable to the date of payment.
2. In the second installment, the borrower will (1) repay the portion of the loan amount to be paid in this installment and (2) all mark-up that is payable to the date of payment.

BORROWING: MONEYLENDER VS. BANK

Individuals or businesses can borrow money from money lenders.



Let's look at the difference between borrowing from money lenders and borrowing from banks:

	Money Lenders	Banks
Smaller loans	✓	
Speed	✓	
Lower mark-up rates		✓
Use of legal system		✓

Smaller loans: Money lenders usually focus on small amounts of loans. They give small personal loans that can be used for payments such as car repairs and rent.

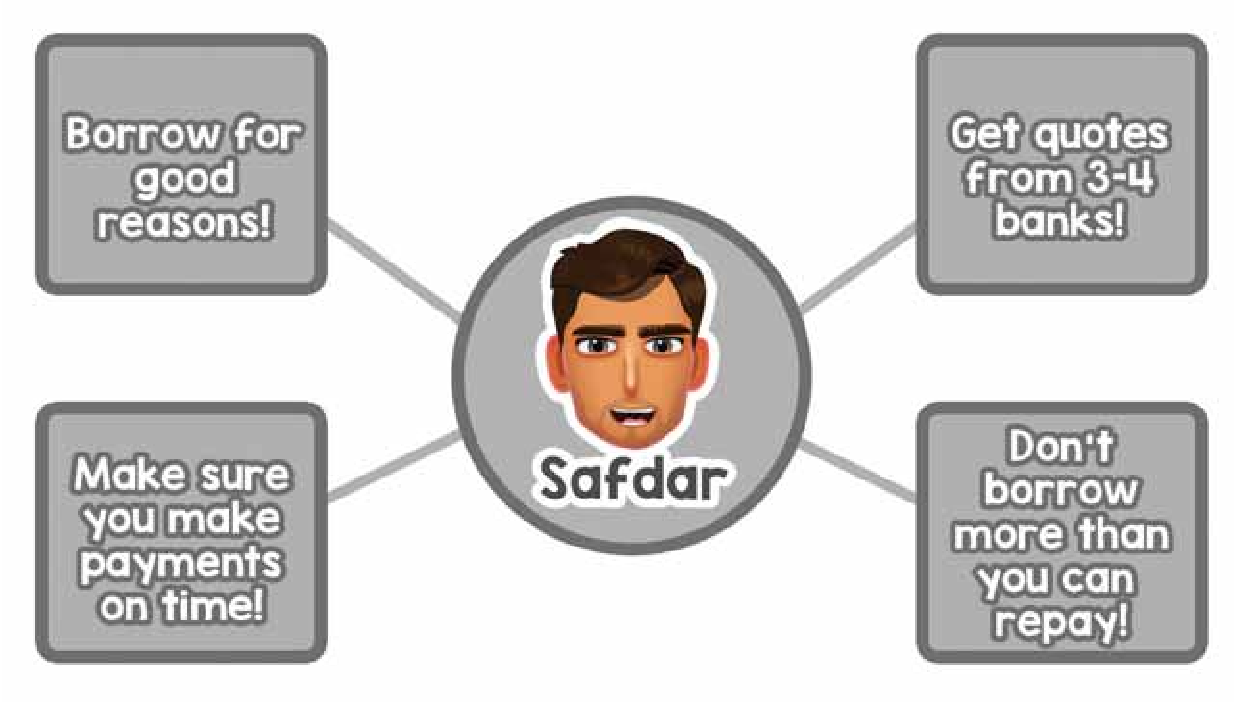
Speed: The approval time for money lenders is usually shorter than banks. Banks take time to conduct background checks. Money lenders do not conduct such background checks.

Lower rates: The mark-up rates of banks are much lower than that of money lenders. Also, it is easier to compare mark-up rates of banks as there is more information.

Use of legal system: If banks are not repaid, they will try to use the legal system to get their money back. Money lenders may use physical violence to get their money back.

BORROWING: SAFE BORROWING

When you borrow money, you make a promise to repay it. You may also make a promise to pay the mark-up. It is important to follow some guidelines when borrowing money.



Borrow for good reasons: Do not borrow money to spend on unnecessary expenses. Also, do not borrow money to invest in risky businesses, in which you may not get the money back.

Compare for better mark-up rates: It is smart to talk to different banks before borrowing money. Before borrowing money, you should check with 3-4 banks about:

a) how much time you will have to repay,

b) how many installments you can repay in, and

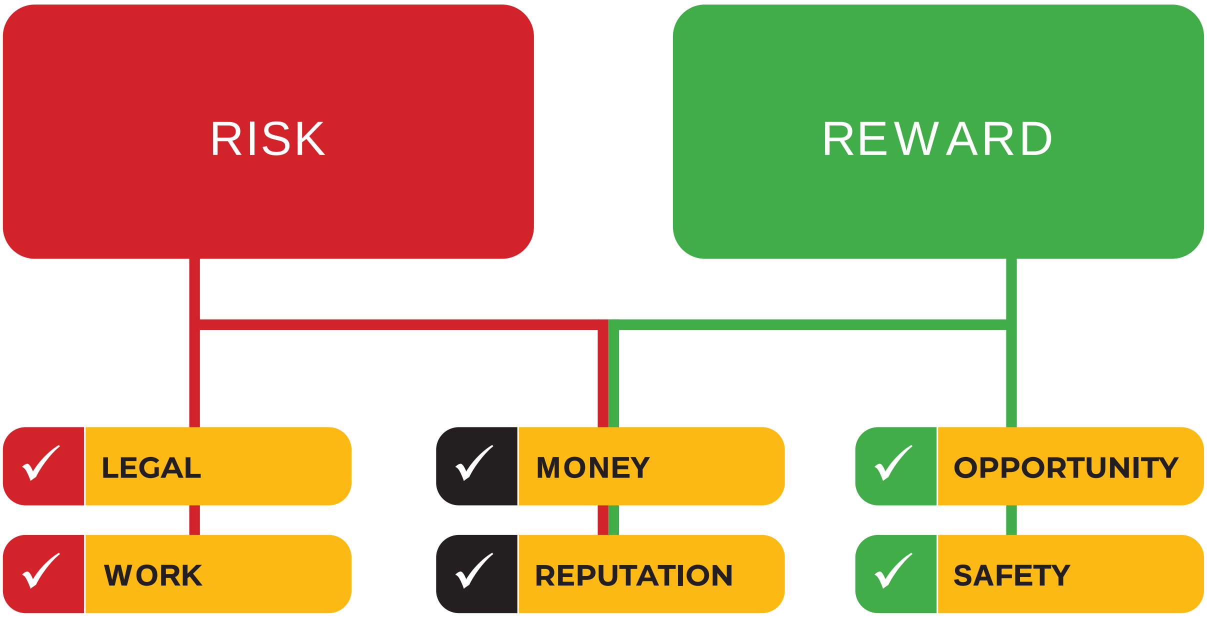
c) the mark-up rate you must pay.

Don't borrow more than you can repay: You should only borrow as much as you can afford to pay back. Imagine your monthly income is Rs. 10,000, and expenses are Rs. 8,000. If you take a loan with a monthly repayment of Rs. 3,000, it is likely that you will not be able to repay it. In this case, your monthly loan installment should not be more than about Rs. 1,000.

Ensure timely repayment: Make sure that you have the money to repay the loan installment and pay the mark-up on the exact date that it is owed. If you do not make timely repayments, banks will not lend money to you in the future.

RISK AND REWARD

In business, you take a risk and expect a reward. What is the relationship between risk and reward?



- Taking a risk does not always lead to a reward.
- Only take a risk after planning and calculation.
- Don’t take risks that you cannot afford.
- Your reward should be greater than the risk you take.
- Take calculated, affordable risks that lead to important rewards.

BORROWING: CALCULATE INSTALLMENT **PAYMENTS AND MARK-UP**

"We will lend you Rs. 1,200,000. You will need to pay this money back in 2 equal annual installments. And you will need to pay mark-up of 15% per year."

Calculate the principal and mark-up payments you will need to make.

Loan Payable in 2 Installments with Mark-Up (Rs.)				
1.	Date of loan	January 1, 2020		
2.	Loan amount	1,200,000		
3.	Loan period	2 years		
4.	Mark-up per annum	15%		
	Installment date	December 31, 2020	December 31, 2021	**Total**
5.	Principal repayment	600,000	600,000	**1,200,000**
6.	Mark-Up payment			
7.	**Total**			
Calculating Annual Mark-Up (Rs.)				
8.	Loan at beginning	1,200,000	600,000	
9.	Mark-Up per annum	15%	15%	
10.	Mark-Up payment			

The solution to this exercise can be found on page 152

BORROWING: COMPARING TWO BUSINESSES

Safdar used to only sell fruit and he had no loans. He plans to borrow Rs. 1,200,000 and use the money to sell fruit juice in bottles. He makes budgets for both businesses.
Compare the budgets for the two businesses and answer the questions below.

Fruit Business Only (Rs.)				
		Year 1	Year 2	Year 3
Income				
1.	Total fruit income	6,875,000	7,507,500	8,186,063
2.	Total juice income	-	-	-
3.	Total Income	6,875,000	7,507,500	8,186,063
Expenses				
4.	Total fruit expense	5,600,000	6,203,610	6,822,490
5.	Rent	240,000	264,000	290,400
6.	Electricity, gas & other expenses	235,000	265,000	300,000
7.	Juice bottles and packaging	-	-	-
8.	Loan Payments	-	-	-
9.	Total Expenses	6,075,000	6,732,610	7,412,890
Profit/Loss				
10.	Profit	800,000	774,890	773,173

Fruit and Juice Business (Rs.)				
		Year 1	Year 2	Year 3
Income				
1.	Total fruit income	6,875,000	7,507,500	8,186,063
2.	Total juice income	4,000,000	5,040,000	6,160,000
3.	Total Income	10,875,000	12,547,500	14,346,063
Expenses				
4.	Total fruit expense	7,800,000	8,820,000	10,120,000
5.	Rent	240,000	264,000	290,400
6.	Electricity, gas & other expenses	800,000	1,000,000	1,200,000
7.	Juice bottles and packaging	600,000	756,000	924,000
8.	Loan Payments	780,000	690,000	-
9.	Total Expenses	10,220,000	11,530,000	12,534,400
Profit/Loss				
10.	Profit	655,000	1,017,500	1,811,663

1. Which business has more income?

....

2. Which business has more profit?

....

3. What happens to profit in the second business in Year 1?

....

4. Which business has more expenses and higher risk?

....

5. What happens to profit in the second business in Year 3?

....

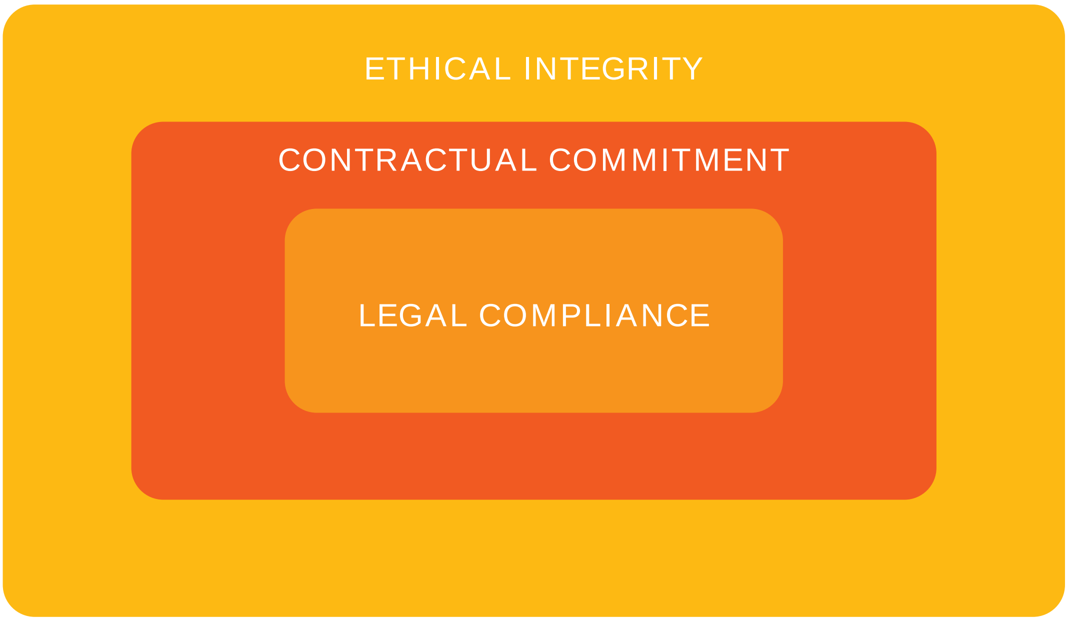
6. Will Safdar make a good decision if he takes the bank loan and goes into the juice business?

....

The solution to this exercise can be found on page 153

ETHICS: WHAT ARE YOUR BOUNDARIES?

What are your boundaries: (1) legal compliance; (2) contractual commitment; or (3) ethical integrity?



Legal compliance: This involves staying within the boundaries of the law. For example, not engaging in corruption, fraud, theft and other specifically prohibited actions. *Would you violate the law? Would you violate the law if you are likely not to get caught? In Pakistan, many people don't pay their taxes fully. How about you?*

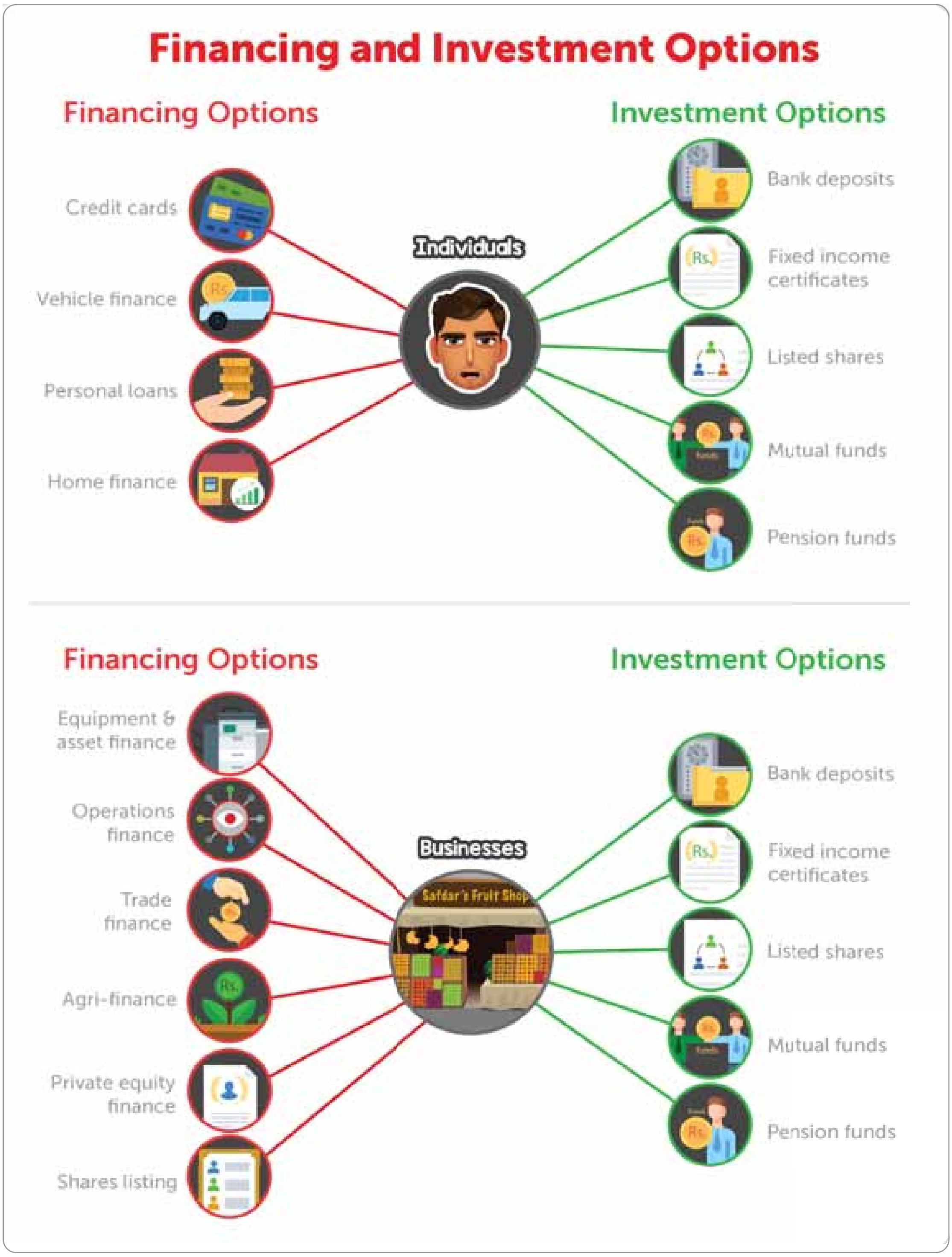
Contractual commitment: Contracts are between specific persons. They typically provide penalties if you violate them. *Would you violate your contracts? What if you contract to sell the only product you have for Rs. 1,000 and the penalty for violation is Rs. 100? Would you violate your contract and pay the penalty if someone offered you Rs. 1,200 for the same product? How about if someone offered you Rs. 1,500?*

Ethical integrity: Ethical integrity involves acting in an ethical and morally correct manner even if there is no specific legal requirement or contractual commitment. *If a seller makes a mistake in pricing would you tell him? If a competitor is likely to win some business, would you lie to win it instead?*

We believe that all individuals and businesses should comply with the law, respect their contracts and act ethically. They should do this because it is the right thing to do, not because of business reasons. But this also happens to make business sense!

INVESTMENT: FINANCING AND INVESTMENT OPTIONS

Individuals and businesses have many options in Pakistan today to obtain financing and invest their money. These options are provided by conventional and Islamic banks as well as by leasing companies, investment banks and other types of financial institutions and by government agencies. Listed below are some of the main financing and investment options available in Pakistan today.



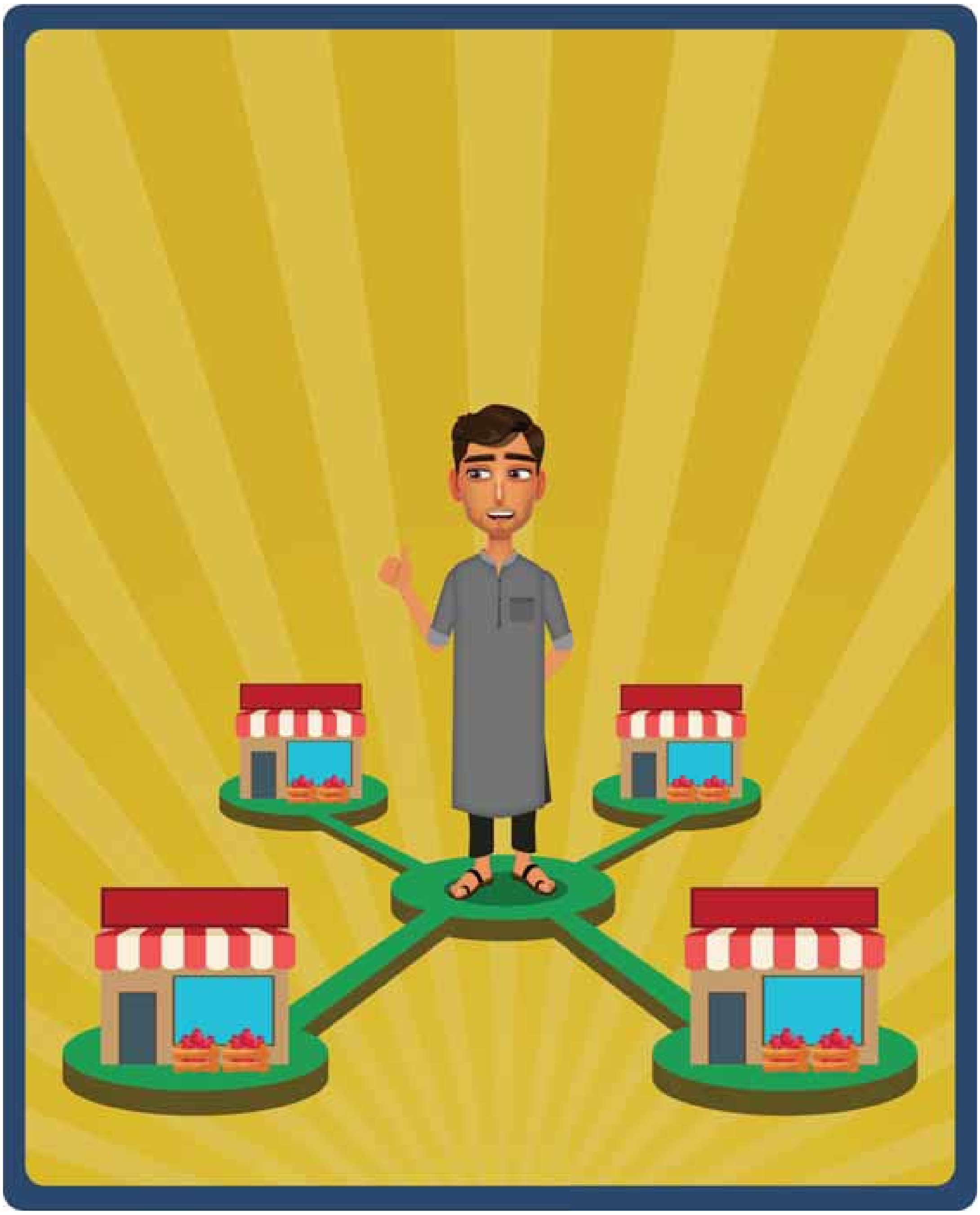
INVESTMENT: FINANCING AND INVESTMENT OPTIONS

Individuals	
Financing Options	
Credit cards	Banks issue credit cards, which may be used to make payments at shops, restaurants, etc. Usually, repayment is made on a monthly basis.
Personal loans	Financial institutions provide personal loans to enable individuals to pay for many types of expenses (e.g., medical, education and home improvement).
Vehicle finance	Financial institutions provide financing to enable individuals to purchase or lease automobiles or motorcycles. Usually, the financing party has the right to take possession of the vehicle if payments are not made on time by the individuals.
Home finance	Financial institutions provide financing to enable individuals to purchase or build homes. Usually, the financing party has the right to take possession of the home if payments are not made on time by the individuals.
Investment Options	
Bank deposits	Individuals can deposit money in savings accounts and obtain a mark-up or profit share on their savings.
Listed shares	Individuals can buy and sell shares of companies listed on the Pakistan Stock Exchange. They may receive dividends on these shares and have a profit (or loss) when the shares are sold.
Fixed income certificates	Individuals can purchase certificates and bonds that provide a fixed or predictable return over a period of time. These certificates and bonds may be issued by the government or by companies.
Mutual funds	Individuals can put money in mutual funds. These funds invest in shares of companies listed on the Pakistan Stock Exchange, in fixed income certificates and in other financial assets. In this way, individuals can benefit from the financial expertise of the fund managers.
Pension funds	Individuals can put money in pension funds. These funds invest in shares of companies listed on the Pakistan Stock Exchange, in fixed income certificates and in other financial assets. Payments made after retirement are tax free or have lower tax.

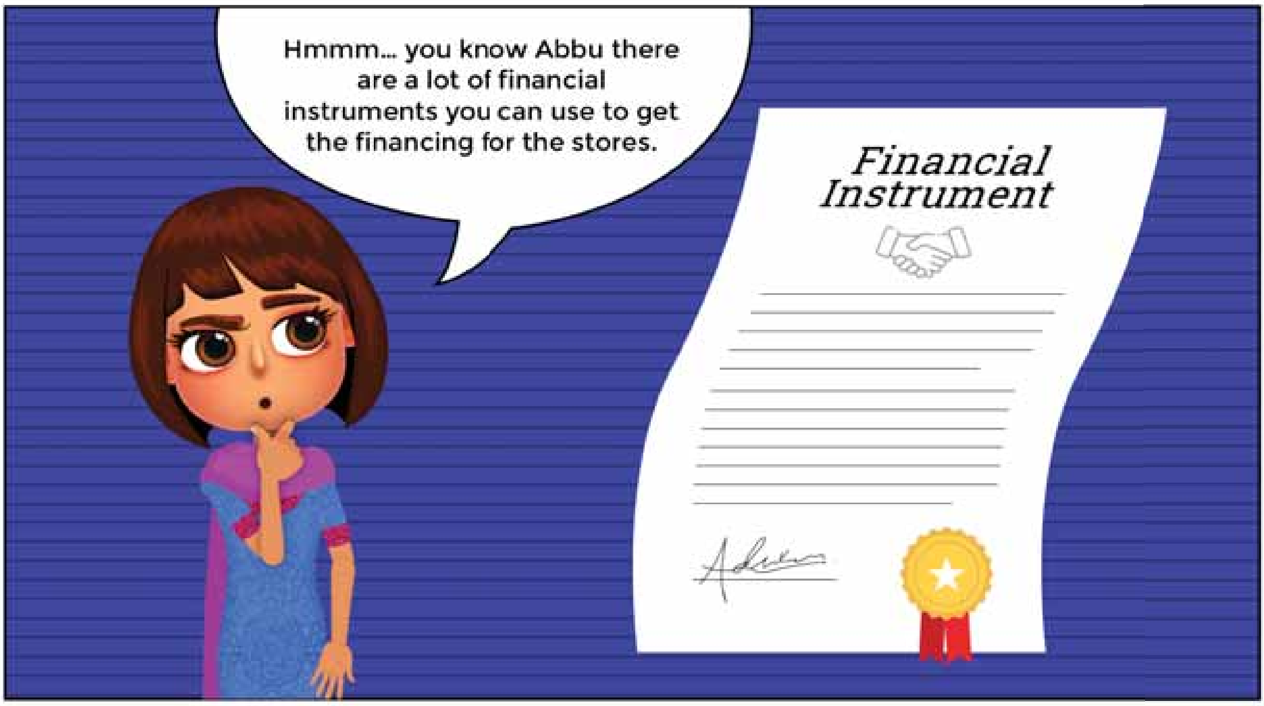
INVESTMENT: FINANCING AND INVESTMENT OPTIONS

Businesses	
Financing Options	
Equipment & asset finance	Financial institutions provide financing to enable businesses to purchase or lease equipment and vehicles and purchase or build factories, offices and buildings. Usually, the financing party has the right to take possession of the asset if payments are not made on time by the businesses.
Operations finance	Financial institutions provide loans to enable businesses to pay for many types of business expenses (e.g., purchasing inventory and managing business cash flows).
Trade finance	Financial institutions provide financing to enable businesses to manage trade operations and the purchase and sale of goods.
Agri-finance	Financial institutions provide financing to enable farmers to purchase equipment, seeds and fertilizers and manage farm operations.
Private equity finance	Financial institutions invest in shares of companies that are not listed. They may receive dividends on these shares and have a profit (or loss) when the shares are sold.
Shares listing	Financial institutions help companies to list their shares on the Pakistan Stock Exchange. Upon listing, the companies can obtain money by selling shares to the public.
Investment Options	
Bank deposits	Businesses can deposit money in savings accounts and obtain a mark-up or profit share on their savings.
Listed shares	Businesses can buy and sell shares of companies listed on the Pakistan Stock Exchange. They may receive dividends on these shares and have a profit (or loss) when the shares are sold.
Fixed income certificates	Businesses can purchase certificates and bonds that provide a fixed or predictable return over a period of time. These certificates and bonds may be issued by the government or by companies.
Mutual funds	Businesses can put money in mutual funds. These funds invest in shares of companies listed on the Pakistan Stock Exchange, in fixed income certificates and in other financial assets. In this way, businesses can benefit from the financial expertise of the fund managers.
Pension funds	Businesses can put money in pension funds for the benefit of their employees. These funds invest in shares of companies listed on the Pakistan Stock Exchange, in fixed income certificates and in other financial assets. Payments made after retirement are tax free or have lower tax.

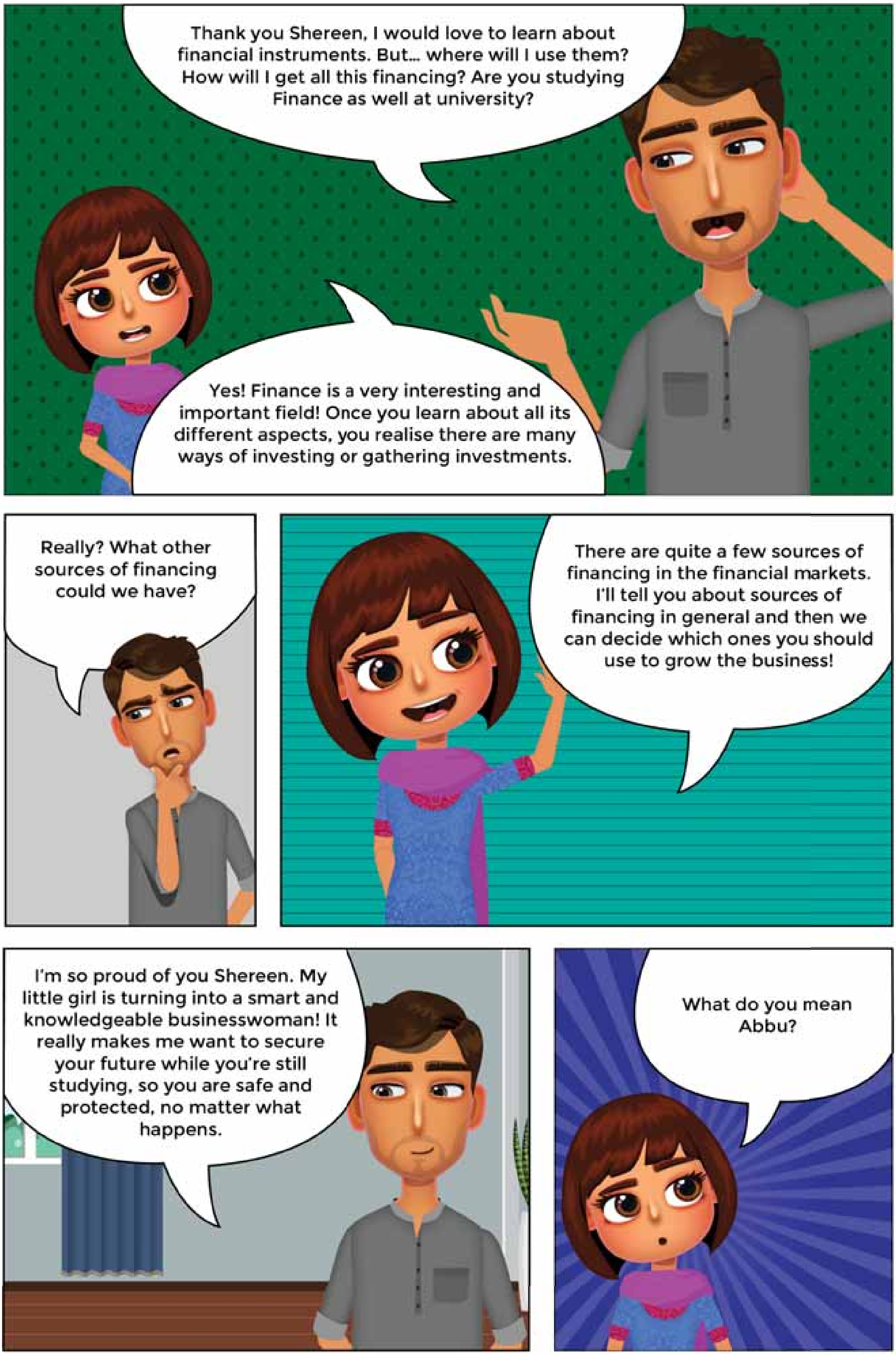
FROM SINGLE STORE TO A CHAIN

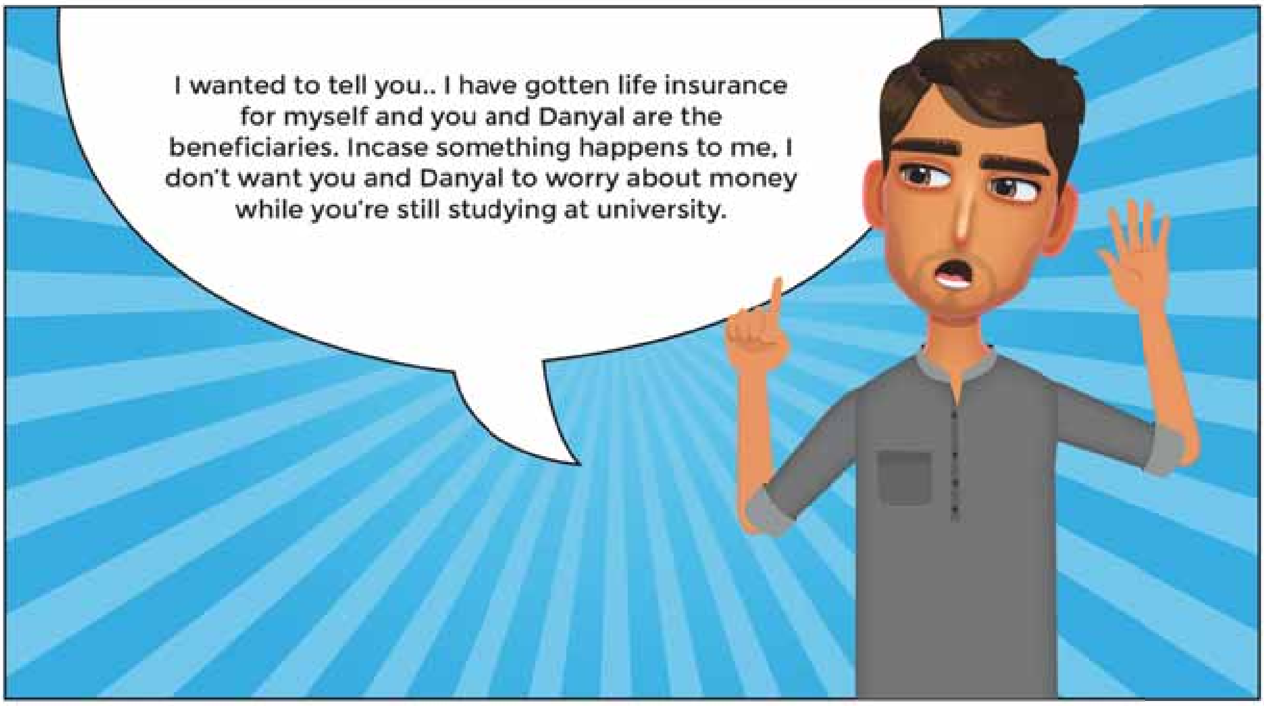



Abbu you are sending quite a bit of money to me at college, it looks like the business we help you set up is doing really well!
Ji beta, it is doing really well. I am even thinking of opening 2 more stores.
But... its not that easy.
Why Abbu? This seems like a great idea!
We are making a lot of money but its not enough to open the new stores. I know we can do even better with more stores but I'm afraid this money isn't enough.


Hmmm... you know Abbu there are a lot of financial instruments you can use to get the financing for the stores.
Financial Instrument


Financial instruments? I am happy to hear that you are learning at your business school! I have no idea what financial instruments are.
Haha yes, I'm learning a lot here. And no worries, I can tell you what financial instruments are. And smart as you are, you will easily understand them and can use them to expand our business!

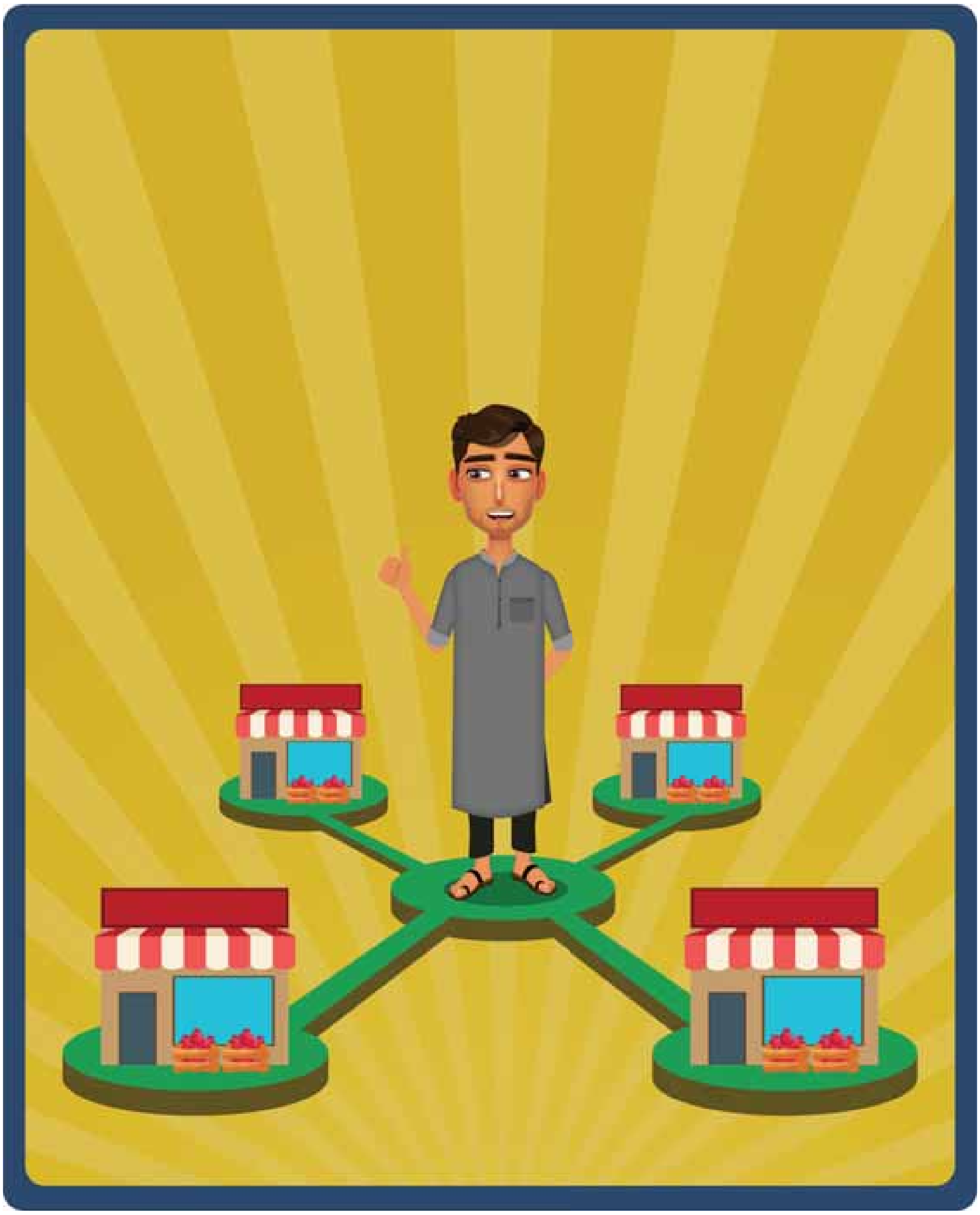

Thank you Shereen, I would love to learn about financial instruments. But... where will I use them? How will I get all this financing? Are you studying Finance as well at university?
Yes! Finance is a very interesting and important field! Once you learn about all its different aspects, you realise there are many ways of investing or gathering investments.
Really? What other sources of financing could we have?
There are quite a few sources of financing in the financial markets. I'll tell you about sources of financing in general and then we can decide which ones you should use to grow the business!
I'm so proud of you Shereen. My little girl is turning into a smart and knowledgeable businesswoman! It really makes me want to secure your future while you're still studying, so you are safe and protected, no matter what happens.
What do you mean Abbu?


I wanted to tell you.. I have gotten life insurance for myself and you and Danyal are the beneficiaries. Incase something happens to me, I don't want you and Danyal to worry about money while you're still studying at university.


Abbuuu, why would you do this? I don't want you to be paying premiums to safeguard us, nothing is going to happen to you!
Beta, anything can happen. We should be prepared for any situation. And life-insurance can also be a type of investment. I will tell you about it later.

The next day, Ali also visits the store from his university so he can learn about financial instruments and sources from Shereen while she educates Safdar. When he reaches the store, he finds that Shereen is still at home with her mother while Safdar is at the store and looking frustrated.

FROM SINGLE STORE TO A CHAIN
WORKBOOK



FINANCIAL INSTRUMENTS

Financial Instruments

A financial instrument is a document or an agreement between two parties regarding financing. It contains the rules and conditions that are to be followed and the rights of each party.

Every business needs financing because a business spends money before it makes money.

The financing a business needs can come from internal sources—in other words, from the business itself—or from external sources, such as a lender or investor.

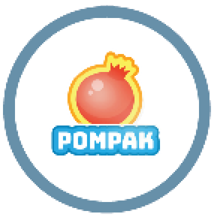
This is true if the business is run by an individual or company or any other type of business entity.

We will learn about financial instruments for companies, but these basic principles apply to all these different types of formal businesses.

Types of Businesses

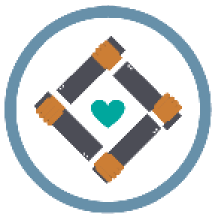
Individual (informal)

Partnership (formal/informal)



Company

Trust



Foundation

Financial instruments may be broadly categorized as debt, equity and other.

Debt Financing vs. Equity Financing

Debt financing involves taking out a conventional loan, mostly through a traditional lender like a bank. Through debt financing you can get the capital or financing more quickly, with an exact idea of how much it will cost you in terms of markup. It also means you retain full ownership of your business. The cons of debt financing include paying back the borrowed amount with an additional interest amount. Flexibility in paying back the amount is limited and delays can be very costly as the interest is compounded.

Equity financing refers to securing capital in exchange for a percentage of ownership in the business. In simple words, it means that you sell a fraction of your business to gain some capital to run or grow it. Equity financing does not require any debt

FINANCIAL INSTRUMENTS

payment but it does make the business owner forgo a percentage of future earnings. If the business is going to grow in scale and become hugely profitable, equity financing could become a more expensive long-term decision as all those profits will be shared with the financier.

Here is a comparison of debt and equity financing in terms of risk, reward, return, and time period.

Difference between Debt and Equity		
Features	Debt	Equity
Loan	Lower risk	Higher risk
Repayment	Lower reward	Higher reward
Loan	Fixed: Amount of loan plus agreed markup	Not Fixed: Value of % share in business
Repayment	Payment due on specified date	Long term, no fixed time period

Types of Debt and Equity Financial Instruments

Types of Debt (Fixed Income) Financial Instruments

Loans

In a loan, the lender makes a loan for a period and expects repayment with an agreed markup.

Bonds / Treasury Bills

A bond is just like a loan except usually bonds are often listed on a financial exchange and are easier to sell.

A treasury bill is a bond issued by the government.

Credit Cards

In a credit card, the card holder takes a loan each time he uses the card and must pay back the money plus a markup next month.

Loans

Bonds
(Treasury Bills)

Credit Cards

FINANCIAL INSTRUMENTS

Types of Equity Financial Instruments

Common shares

In the case of common shares, investors invest money into a company or venture and receive shares. These represent a percentage ownership interest in the company or venture.

Preferred shares

In the case of preferred shares, if the company closes down, preferred shareholders will get their investment and any returns before common shareholders are paid.

Preferred shareholders may also have rights to special payments from the company's profits.

Funds (Including Mutual Funds)

In the case of a mutual fund, investors invest their money in a fund. The fund is managed by a fund management company. It use the money in the fund to invest in shares of many companies.

In this way, investors in a mutual fund obtain the services of an expert fund management company and can invest in many companies through one investment.

Common Shares

Preferred Shares

Funds

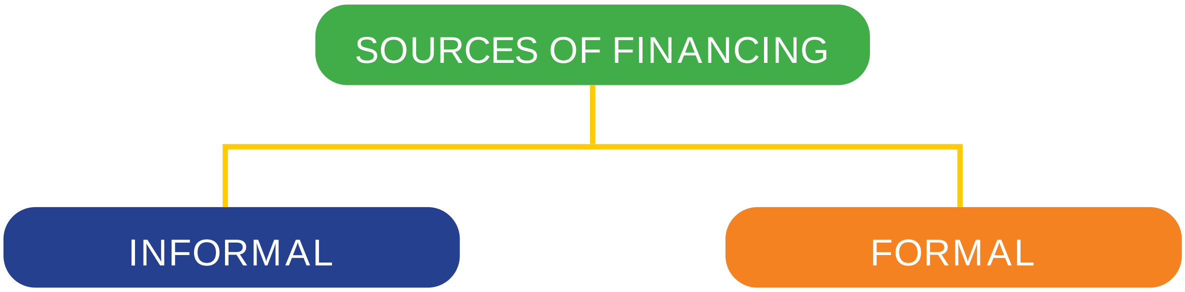
FINANCIAL MARKETS AND SOURCES OF FINANCING

Who needs financing?

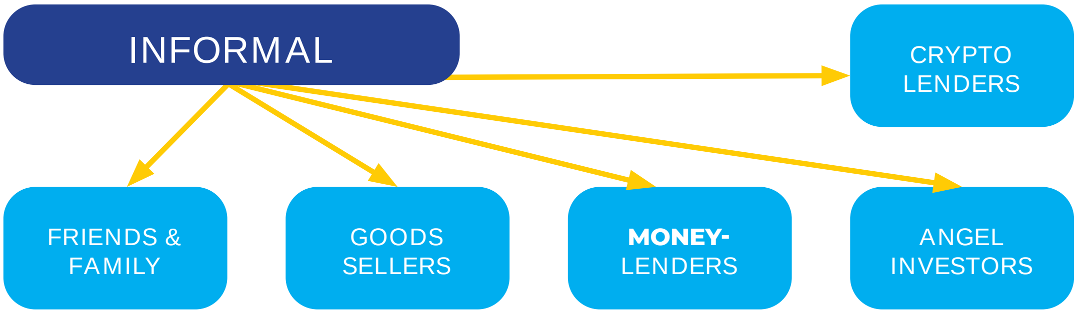
- Individuals
- Businesses
- Governments

There are many sources from which individuals and businesses can get financing. There are also other sources available to governments, but, in this section, we will focus on financing sources for individuals and businesses.

Sources of financing can be formal or informal.



INFORMAL SOURCES



FRIENDS AND FAMILY

One important part of informal financing is friends and family. Many individuals borrow money from friends and family, and they can be an important source of equity financings for new businesses.

MONEYLENDERS

Some people also get financing from moneylenders. This is not a good idea.

Moneylenders often charge very high rates and you can get in physical danger if you cannot pay on time.

SELLER FINANCING

When you buy something from your local *karyana* and pay later, that is seller financing. In farms, *arthis* provide seeds and fertilizer on credit. Usually, when seller financing is provided informally for a business it can be very expensive.

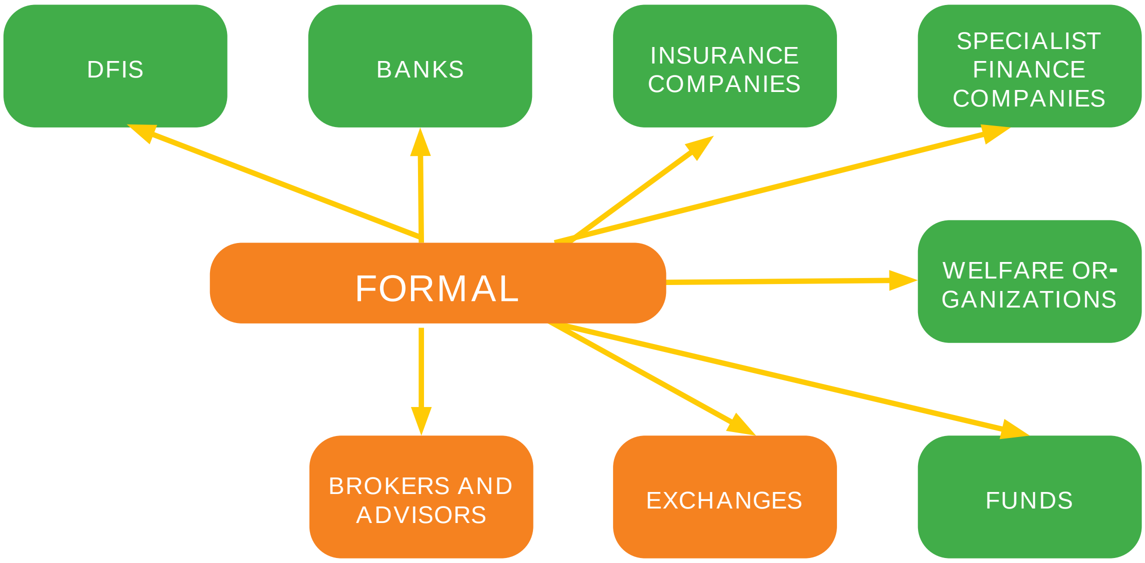
ANGEL INVESTORS

Angel investors are people who invest in the early stage of a business. These investors often invest in technology-related businesses.

These investors stand to gain the most as they enter a venture on the ground floor and rise with the success of the business. This why their returns are very high for a comparatively low investment. The risk for angel investors is also quite high as it is difficult to gauge which enterprise will be successful at such an early stage.

FORMAL SOURCES

Formal sources of financing are usually more business-oriented with traditional institutions like banks, funds and welfare organizations.



BANKS

Full-service Banks

Full-service banks provide loans to both individuals and businesses.

Micro-finance Banks

Micro-finance banks provide very small loans to individuals and small businesses. These loans can be for personal use or very small businesses.

DEVELOPMENT FINANCE INSTITUTIONS OR DFIS

DFIs are government-linked financial institutions which provide loan and equity financing for businesses. They usually provide financing for fairly large businesses.

SPECIALIST FINANCE COMPANIES

There are many types of specialist financial institutions.

These include **credit card companies**. Many banks also issue credit and debit cards. Credit card loans have high markups so it is not a good idea to use them except for short term borrowings.

Leasing companies and **installment sales companies** provide financing for individuals and businesses to acquire vehicles and equipment.

FORMAL SOURCES

Fintech is a quickly growing area of finance. **Fintech companies** use technology to provide financial services at a low cost. So far, only a few such companies provide long-term financing.

INSURANCE COMPANIES

Insurance companies include life insurance companies, which insure individuals.

General insurance companies provide insurance for homes and businesses too. Through some insurance plans and products the insurance premiums are invested to get returns on those investments when the insurance policy expires.

WELFARE ORGANIZATIONS

Welfare organizations or non-profits such as charities and foundations provide funding for good causes.

And government-linked welfare programs such as Benazir Income Support Program are now a major part of welfare funding in Pakistan.

FUNDS

Funds are also a major source of financing.

These include, private equity funds, venture capital funds, pension funds, and mutual funds.

EXCHANGES

An exchange, like the Pakistan Stock Exchange, is a financial market and it plays a role in financing.

BROKERS AND ADVISORS

Brokers and advisors help companies raise money and sell and buy shares on the exchange.

Real Estate Investment Trusts, which deal in landed properties, and Modarabas, which are Islamic investment companies, are also listed on the exchange.

And mutual funds, which hold shares in other companies, are also listed on the exchange.

FINANCING NEEDS AND REQUIREMENTS

While there are many sources of financing, you need to have a clear plan.

As part of your plan, you need to ask yourself a few questions. The answers to these questions will lead you to the appropriate source of financing for you or your business.

Key Questions

What is the purpose of the financing?

Will debt or equity be more suitable?

What is the size and stage of my business?

Who will be interested in investing in such a business?

CHOOSING THE RIGHT TYPE OF FINANCING

What is the source of financing for each financing need?

Identify the source of financing that applies to each of these 12 situations. Circle the correct option.

1 Shereen and Ali need money to buy a juice machine which will last for three years.

Installment Sales Company	Bank

2 Safdar wants to buy a motorcycle for his employee but cannot pay all cash.

Leasing Company	Seller Financing

3 A restaurant buys fruit from a fruit seller and wants to buy now but pay later.

Installment Sales Company	Seller Financing

4 Safdar wants to insure the inventory and equipment in his shop.

General Insurance Company	Life Insurance Company

5 A fruit seller with a cart wants some money to buy more fruit to sell.

Bank	Microfinance Bank

CHOOSING THE RIGHT TYPE OF FINANCING

6 Safdar has expanded to four shops and needs financing for all the fruit he will need to buy every day.

Bank	Microfinance Bank

7 Safdar wants to obtain equity financing for his company from as many people as possible.

Stock Exchange	Venture Capital Firm

8 Safdar wants to quickly transfer money through his mobile phone.

Fintech Company	Venture Capital Firm

9 Safdar wants to get insurance so that his family are taken care of if something happens to him.

Life Insurance Company	Health Insurance Company

10 Safdar wants to pay for a dinner he has had at a hotel but does not have cash.

Credit Card	Microfinance Bank

CHOOSING THE RIGHT TYPE OF FINANCING

11 Safdar wants to borrow money to build a new house.

Bank	Fintech Company

12 Safdar wants to deposit some money and earn a return and after he has saved enough, he will buy a car.

Bank	Leasing Company

The solution to this exercise may be found on page 154.

NAME TBD
WORKBOOK

DIGITAL BANKING AND FINTECH

Digital Banking

Digital banking refers to the delivery of banking services and financial products through digital channels such as online banking, mobile banking, and ATM banking. This allows customers to access and manage their banking accounts, make transactions, and pay bills through their computer, smartphone, or other digital devices.

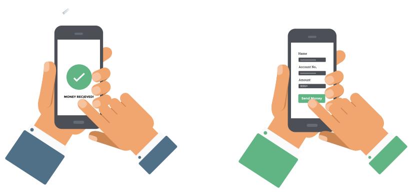
Almost all traditional banks now also offer digital banking services, however there are some banks that are purely digital banks. These banks offer their financial products primarily through digital platforms or electronic channels.

To benefit from digital banking, a user must have a bank account in a traditional bank and then activate digital banking from the bank. They can then download the app or visit the bank's website, log in, and use the services on offer.

Applications and Benefits of Digital Banking

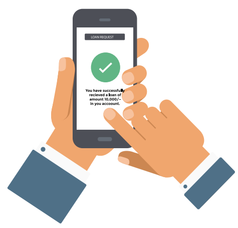
Digital banking offers customers a more convenient and efficient way to manage their finances, as they can perform many banking tasks 24/7 without having to visit a physical branch.

Applications of digital banking


Sending/receiving money


Managing bank accounts

Paying bills


Applying for loans

DIGITAL BANKING AND FINTECH

State Bank's Role as Regulator

The State Bank of Pakistan has launched a licensing and regulatory framework to set up digital banks as a separate category in the banking business.

You can fulfil your banking needs without physically going to the bank. This is service on the go or from the comfort of your home.

Financial Technology (Fintech)

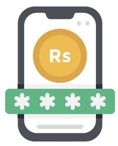
Digital banking is part of a field called Financial Technology or Fintech.Fintech is a term used to describe all the companies and technologies that offer financial products and services.

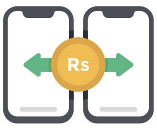
The goal of fintech is to make financial services more accessible, efficient, and affordable, often by using new technologies such as blockchain and artificial intelligence. Fintech has the potential to revolutionize the way we access, manage, and invest our money.

Applications and Benefits of Fintech

With the increase in use of cell phones and digital devices, Fintech has the ability to reach more consumers. The applications of fintech include:


Mobile banking


Digital wallets


Peer-to-peer transactions


Quick loans


Investment portfolio management


Trading platforms

DIGITAL BANKING AND FINTECH

RAAST – Pakistan's First Instant Payment System

RAAST is Pakistan's first Instant Payment System. It is a fintech initiative taken by the State Bank of Pakistan that enables instant end-to-end digital payments between individuals, businesses, and government entities.

It provides a single link to a central infrastructure that makes making digital payments accessible across any channel to customers of any financial institution.

SECP's Role as Facilitator and Regulator

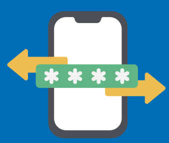
The Securities and Exchange Commission of Pakistan, or the SECP, has set up a Regulatory Sandbox for innovative fintech companies to test their products before being launched full-scale.

Protection From Malicious Activity

As fintech gains popularity, it is important to understand that it is still a new phenomenon. Not all fintech companies are regulated as well as traditional banks and instances of fraud and deception are possible.

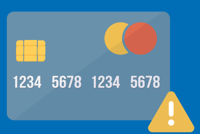
Therefore, it is important to be cautious when trusting any fintech firm with money. A wary mindset and good digital hygiene goes a long way.

To protect yourself, be aware of your rights and take protective measures such as:



Never share your password or security details with anyone.

Confirm the source of any digital communication and make sure that it is authentic.



Be wary of unusual payment requests.

Set strong passwords.

Use anti-virus programs to protect your device.

TAXATION

What is Taxation?

Taxation is a process by which a government provides services to its citizens. In order to build roads, hospitals, schools, and provide essential amenities, the government needs funds. It acquires these funds from the citizens, by charging a fee—or tax—on any income they earn, or any product, good, or service they buy.

There are two types of taxes: direct and indirect. Let's learn more about the different types of tax that Pakistani citizens must pay.

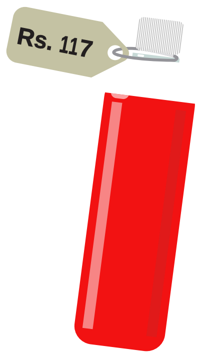
Indirect Taxes

Indirect taxes are paid by companies and corporations to the government. The government assigns a tax on every product sold and collects that amount from companies.

Sales Tax

Companies collect this tax from the end consumer. This means they set a price for a product and then sales tax or VAT is added on top of that price. The combined cost is paid by the customer:

Cost of one small box of juice:		Sales tax (17%)		Price for the end customer:
RS. 100	+	RS. 17	=	RS. 117



Sales tax or VAT is added to every service and product manufactured in Pakistan.

Excise and Custom Duty

Excise Duty is a special tax charged by the government for specific goods manufactured in the country like cigarettes, aerated drinks, and certain types of cars.

Custom Duty, on the other hand, is a tax for goods imported from outside the country. If you buy a mobile phone abroad and bring it into Pakistan, you'll have to pay this tax when you go through customs at the airport.

TAXATION

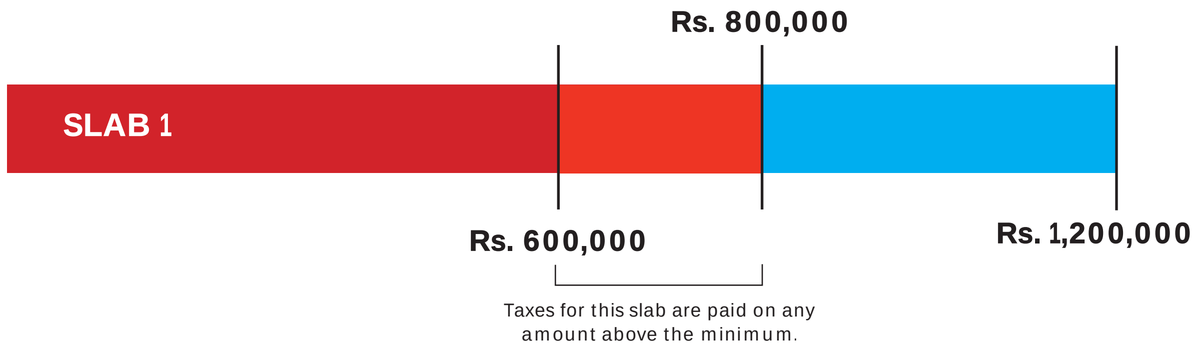
Direct Taxes

Income Tax

Income tax is a tax on the money that you earn. It is based on your salary and is calculated as a percentage of your income. In Pakistan, the income tax rate ranges from 5% to 35%, depending on your income level.

The rates are divided into income slabs. Slabs ensure that someone who earns a low salary pays lower taxes than someone who earns a high salary. The slabs are based on annual earnings.

The first and lowest slab is for those people who earn more than Rs. 600,000, but less than Rs. 1,200,000 every year. They pay 2.5% taxes on any amount they earn above the minimum amount. If your annual earnings are Rs. 800,000, for example, you would pay 2.5% tax on Rs. 200,000 (which is the amount over the minimum amount of Rs. 600,000 in this slab). This would be around Rs. 5,000 a year.

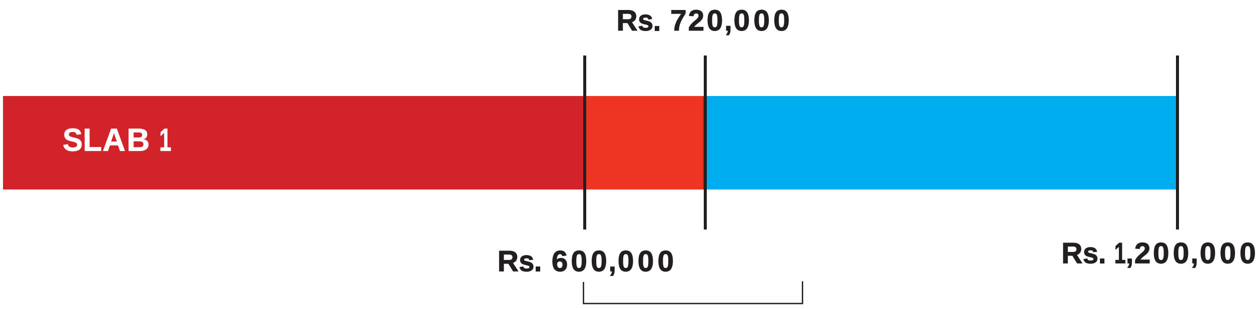


These slabs are revised by the government every year. The rates for 2022 – 2023 are:

Taxable income (PKR)		Tax on column 1 (PKR)	Tax on excess (%)
Over (column 1)	Not over		
0	600,000		0
600,000	1,200,000		2.5
1,200,000	2,400,000	15,000	12.5
2,400,000	3,600,000	165,000	20
3,600,000	6,000,000	405,000	25
12,000,000	12,000,000	1,005,000	32.5
		2,955,000	35

In the table above, the first two columns are the minimum and maximum amounts in each slab. The third column is the fixed tax to be paid in each slab. The final column is the percentage to be paid on anything over the minimum amount.

CALCULATING TAX



In the image above, Daniyal earns Rs. 720,000 a year, which is Rs. 60,000 every month.

Based on the table explaining the slabs, can you calculate how much tax Daniyal should pay in 2023? Fill out the blanks in the steps below:

Step 1:

Identify taxable amount based on the slab:

Salary:	Rs. 720,000
Minimum slab amount:	Rs. 600,000
Amount in excess:	

Step 2:

Calculate the taxable income tax amount:

$$\frac{\text{Tax rate on excess x Taxable income (excess)}}{100}$$

= Annual taxes to be paid

TAXATION

Business Tax

Businesses, just like individuals, also pay income tax. Businesses pay a percentage of their earnings to the government based on their size and income. Just like individuals, the amount of tax is broken down into slabs. The rates for 2022 – 2023 are:

Company type	2022	2023	2024 & onwards
Banking company	35%	39%	39%
Public company other than a banking company	29%	29%	29%
Any other company	29%	29%	29%
Small company	21%	20%	20%

Businesses pay a minimum amount to the Federal Board of Revenue (FBR) regardless of whether they earn profits or not. This is particularly important for small and medium businesses.

Property Tax

Both businesses and individuals also pay taxes to their local governments on any property they own. This may be a commercial or residential property.

TAXATION

Filing Tax Returns

It is the responsibility of every citizen to register their source of income with FBR and to file yearly tax returns.

You can file returns with the help of a tax accountant or firm. Or, you can use FBR's online platform to file them yourself. Simply go to **https://iris.fbr.gov.pk/** to sign up. FBR has videos and documents that can walk you through the process of filing returns step-by-step.

Advantages of Being a 'Filer'

Citizens and businesses that register with FBR and file yearly tax returns are known as 'Filers'. Compared to non-Filers, Filers have several distinct advantages:

FILERS	NON-FILERS
Pay less withholding tax on all financial services	Pay 100% more withholding tax on all financial services
Pay a lower tax on property and vehicle purchases and sales, investment dividends, profits on savings	Pay a higher tax on property and vehicle purchases and sales, investment dividends, profits on savings
Small chance of being audited by FBR	High chance of an FBR audit

INSURANCE

Unplanned expenses relating to loss of life, property or assets can have a major effect on your financial future. To manage and protect against such financial risks, we use insurance. Insurance is a mechanism by which risk is transferred from an individual or a business to an insurance company.

An insurance policy is a contract in which one party (insurer) agrees to pay another party (insured) in the event of a loss, in return for a small monthly fee or 'premium'. Premiums are affordable as the insurance company 'pools' many clients' risks. In the long-run, insurance is cheaper than having to replace assets using your own personal or business savings.

TYPES OF INSURANCE

Types of Insurance				
	Type of Insurance	**Personal**	**Business**	**Description**
1	Property	✓	✓	Pays for expenses of repair or replacement of property if the property is damaged, destroyed or stolen.
2	Home	✓		Pays for expenses of repair or replacement of a home if the home is damaged or destroyed.
3	Health	✓	✓	Pays for hospital and medical expenses in the case of an illness.
4	Life	✓		In the event of the death of the insured, a named beneficiary receives the amount of the policy. Term life insurance can also be used as a savings tool, which pays out after a specified term is over.
5	Automobile	✓	✓	Pays for automobile repairs and personal injury expenses in the case of an automobile accident.
6	Livestock		✓	Pays the owner in case of death of livestock caused by natural causes, disease, accident or injury.
7	Crop		✓	Pays the farmer in case of damage to crops by disasters including, rain, flooding, insect attack, fire or frost
8	Worker's Compensation		✓	Pays a worker for any losses caused by injury at work and protects the employer from legal complications.

Assessing insurance needs

Assessing insurance needs is an important step in ensuring you have adequate coverage. This can be done by considering your personal or professional circumstances and financial goals. For example, if you have a family, you may want to consider life insurance to take care of your loved ones in the event of your death. If you own a home or car, you may want to consider property and liability insurance.

TYPES OF INSURANCE

Match the type of insurance with the personal circumstances of the customer:

Circumstances

A — Person A is a single breadwinner in her home. She has two children and wants to provide them financial support in the event of her death.

B — Person B is a car owner who wants to be protected against the cost of repair in the event of an accident.

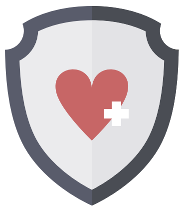
C — Person C is a farmer with a pomegranate orchard and wants to be financially protected incase his crop is damaged due to natural circumstances.

Insurance Product

General insurance, which would provide coverage for accidents or damage to homes and property, including vehicles.

Crop insurance, which would provide coverage of damage to farms, farmland, or crops that may be caused by natural disasters.

Life insurance, which would provide a lump sum or regulated payments in the tragic event of the death of a family member.



The solution to this exercise may be found on page 159.

CHOOSING THE RIGHT INSURANCE PRODUCT

Choosing the right insurance product can be a daunting task, but it's important to make the right decision. You can compare insurance policies from different providers, considering factors such as costs, coverage, and the insurance company's reputation for claims payments. A variety of factors can influence the cost of insurance, including type and amount of coverage, and the age and health of the policyholder. It's also important to regularly review and adjust your insurance premiums to ensure they are in line with your changing circumstances and financial goals.

If you are a 22 yr. old just starting out a career, which life insurance cover works best for you? Why?

Terms	Big family insurance	City life insurance
Premium	Rs. 10,000 a year	Rs. 15,000 a year
Coverage	Rs. 9,500,000	Rs. 5,000,000
Term	25 years	12 years
Tick the option you would choose	☐	☐

The solution to this exercise may be found on page 160.

EARNING WHILE LEARNING!

Ali goes to meet Shereen at her university because he has been thinking about his future plans and really wants to know what Shereen thinks about them.


I know quite a bit about cryptocurrency from my friends, it makes for a good safe investment. And what do you mean investing in only one thing?


Ali, to make good and safe investments, you need to have an investment portfolio. And you should do your own research about cryptocurrency rather than listening to just your friends. You could get scammed or become victim to fraud!
Hmmm, I knew it was a good decision to discuss this with you. Can you teach me about investment portfolios and fraud? I can tell you what my research has shown about cryptocurrency.

EARNING WHILE LEARNING
WORKBOOK

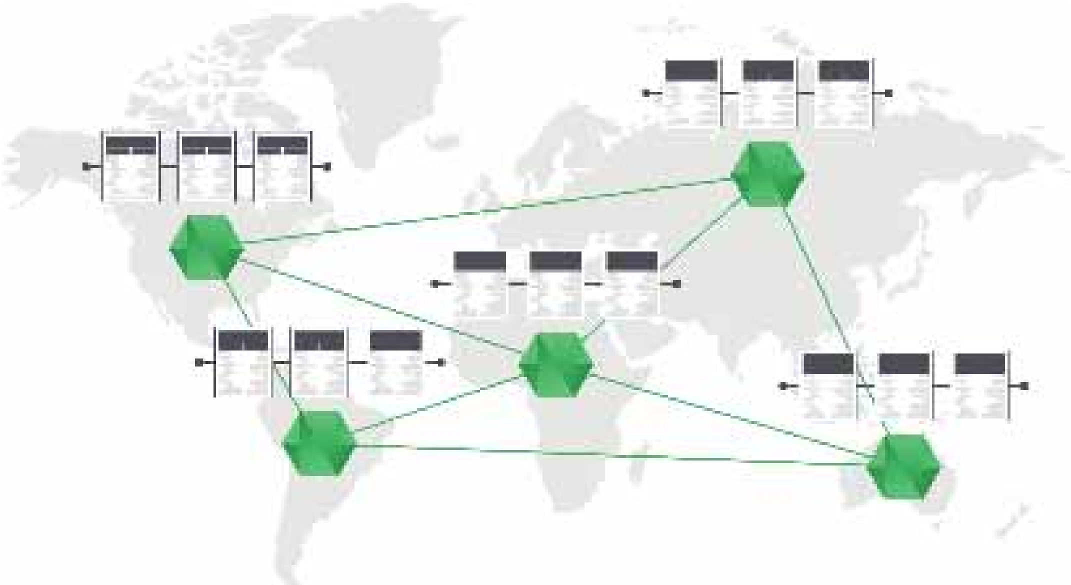
BLOCK CHAIN & CRYPTOCURRENCIES

It uses cryptography for security.

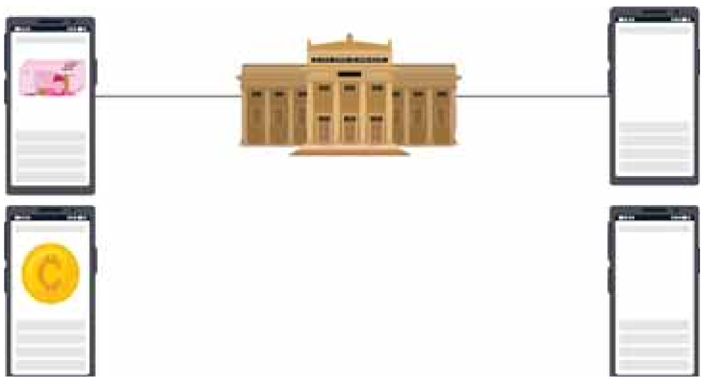
All transactions made through cryptocurrency are secure and cannot be forged due to the use of cryptography.

The records or 'ledger' is maintained across a network of computers.

This means that even if one computer is hacked or compromised, the record or data of cryptocurrencies is preserved. It is maintained across a network of computers all over the world.



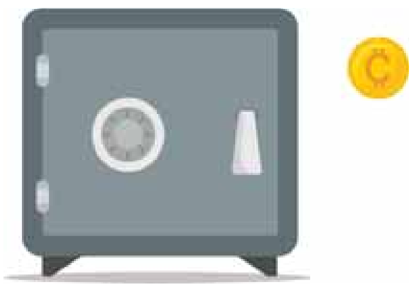
Due to these benefits, cryptocurrency offers many applications. Some applications of cryptocurrency are:



1. Make digital payments: cryptocurrency can be used to make digital payments for goods and services.

2. Decentralised finance: It can be used as a tool for Decentralised Finance, lending and borrowing, without the influence of a central bank or a country's economic policy.

BLOCK CHAIN & CRYPTOCURRENCIES



3. Store of value: Cryptocurrency can be used as a store of value. Just like people buy property or gold to save and store their money.

4. Investment: If you buy a cryptocurrency and its value increases, you have made money as you would through any other investment.

5. Cross-border transfers: Cryptocurrency can be used to make cross-border transfers such as remittances. These transfers are fast, cost-effective, and secure, and they do not need intermediaries like banks or money transfer agencies.

Benefits and Applications of Blockchains

The benefits of cryptocurrency are actually the benefits of blockchain technology. These benefits offer a lot of applications for blockchains, the biggest of which is cryptocurrency. Other applications of blockchains are:

1. **Non-fungible tokens or NFTs** - this is digital property like images, videos, or songs that can be bought and sold.

2. **Smart Contracts** - as blockchains are both transparent and secure, they are used to make smart contracts.

Smart contracts are programs stored on a blockchain that run when predetermined conditions are met. They typically are used to automate the execution of an agreement so that all participants can be immediately certain of the outcome, without involving an intermediary.

3. **Supply chain management** - using blockchain to improve transparency and traceability in supply chain operations.

4. **Identity management** - using blockchain to securely store and manage personal identity information.

5. **Digital voting** - using blockchain to provide secure and transparent voting systems.

BLOCK CHAIN & CRYPTOCURRENCIES

6. Gaming - using blockchain to create and trade in-game items with real-world value.

7. Real estate - using blockchain to manage property transactions and ownership records.

8. Healthcare - using blockchain to securely store and share medical records and personal health information.

History of Cryptocurrency

The idea emerged in the 1980s with advancements in the field of cryptography.

The first cryptocurrency, Bitcoin, was launched in 2009 but it gained extreme popularity in 2017 when its value rose from $1,000 to $20,000 before falling back to under $10,000. This reflects the volatility of cryptocurrency.

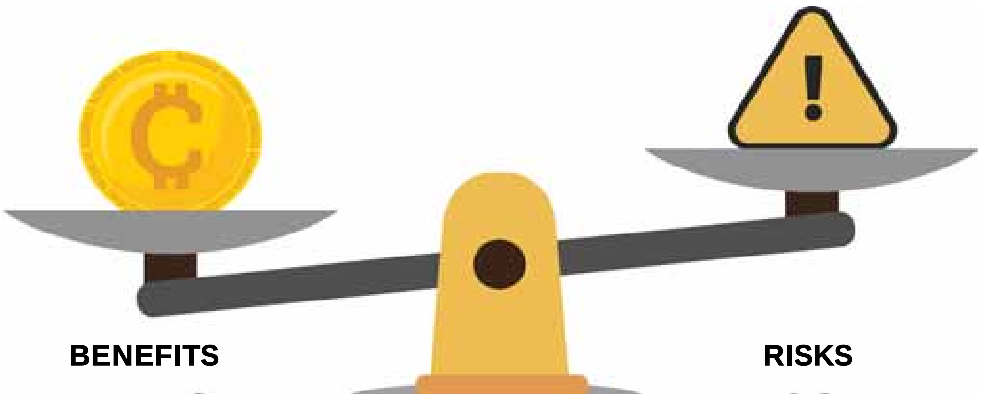
As cryptocurrency is decentralised and does not come under the provision of a central bank, governments across the world are currently letting the free market self-regulate cryptocurrencies. But, as more and more applications of cryptocurrency are coming forward, governments are starting to form policies to regulate and control it, to protect the consumers.

Pakistani State's Stance on Cryptocurrency

The State Bank of Pakistan is aware of the pros and cons of cryptocurrency but believes that its risks far outweigh the benefits.

The State Bank's stance is that cryptocurrency is very volatile and is not a good vehicle for investment or storing of value. Therefore, it only adds instability to the system and has the potential to create chaos and undermine the stability of the market. This hinders the SBP ability to keep Pakistan's economy stable.

Governments across the world are currently letting the free market self-regulate, though that may change in the future.



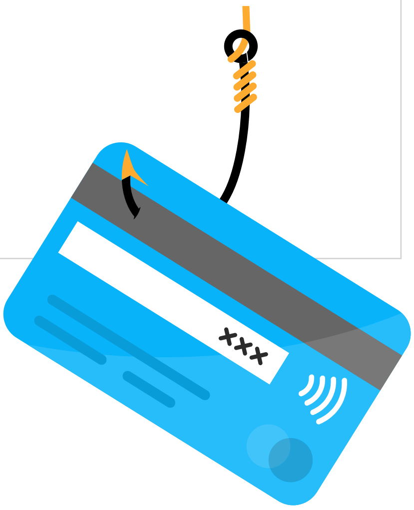
FRAUD

Financial fraud is a crime in which someone deliberately misleads or tricks others to steal their money or financial resources. It is often done by hiding or changing important information through deception and lying. Detecting and preventing financial fraud is an important issue for individuals and businesses.

There are two main categories of fraud: investment scams and identity theft.

INVESTMENT SCAMS

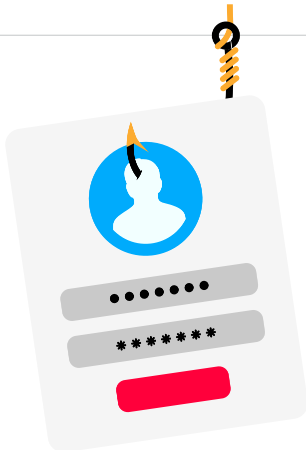
In investment scams, an individual will take a victim's money by promising a very high profits or returns. These scammers can be strangers or acquaintances. They can even be colleagues, friends, or family. These opportunities are not real: the scammers are just trying to take your money.



IDENTITY THEFT

Identity theft is when someone steals your personal information, such as your name, address, CNIC, or bank account details, without your permission or by deceiving you. They might tell you they urgently need your details to prevent your money from being seized. They might also say they want to offer you a new type of financial service, like a loan.

The person is likely a scam artist trying to get important security information. If you give any personal details, they might be able to access your accounts, or be able to make online payments for themselves.

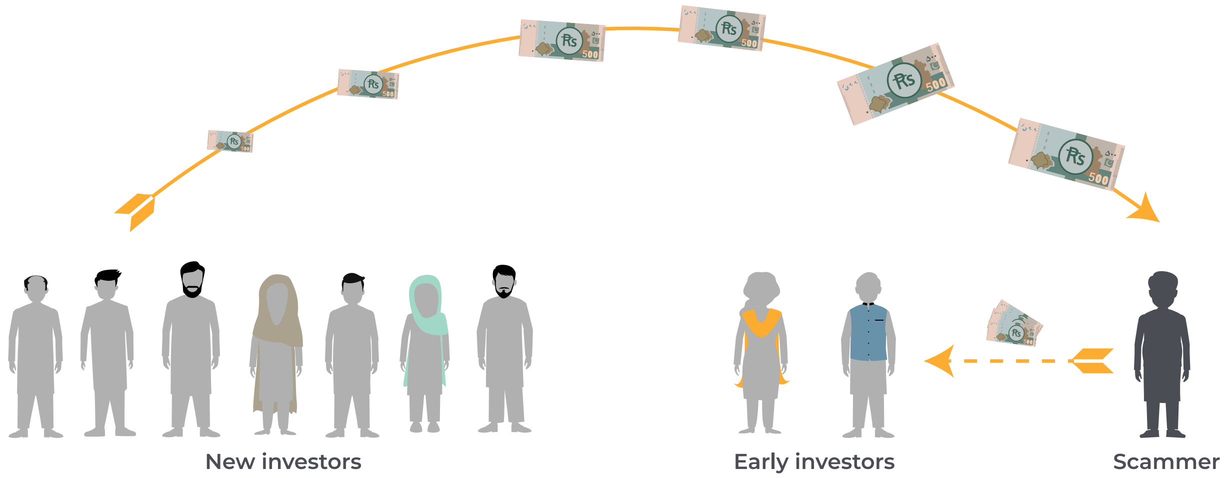


FRAUD

Types of Investment Scams

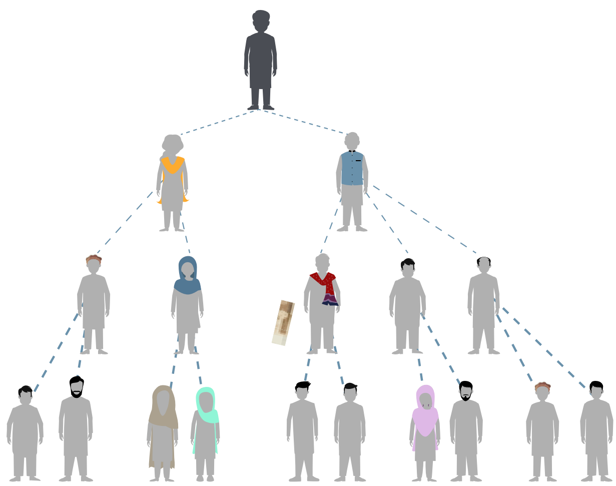
PONZI SCHEME

A Ponzi scheme is a specific type of investment scam in which early investors may actually receive high returns initially from the scammer. However, these returns might be paid from the contributions of new investors to give the perception of trustworthiness. Eventually, no new investors will be paid because the scammer will keep all investments for themselves. By the time the scam is discovered, the scammer will have disappeared by going into hiding or by leaving the country.



PYRAMID SCHEME

A pyramid scheme is a scam in which early investors—who are the people at the top of the pyramid—are asked to recruit other investors. These new investors will in turn be expected to recruit even more investors. Each new investor will pay money upwards to existing investors. The money will travel up to the first investors but will eventually dry up at the bottom layer. The whole scheme will finally collapse as there will not be enough new members to pay everyone at the top.



Pyramid schemes rely primarily on the recruitment of new members to generate profits, rather than on the sale of an actual product or service to consumers. Even if there is a product bought primarily by new investors rather than consumers, the program may still be a pyramid scheme rather than a legal business opportunity.

FRAUD

Types of Identity Theft

Let us take a look at the different ways in which identity theft can occur.

FAKING AUTHORITY:

Criminals create fake emails, text messages or websites to trick you into giving your personal information, such as passwords or credit card details. They may also call you and pretend to be a trusted entity like a bank.

HACKING:

Criminals can hack into computer systems to steal personal information or passwords. They can also send links via WhatsApp or text message. If you click on the link, you may allow a virus to be installed on your device and steal or alter your data.

SKIMMING:

A fraudster may install an ATM skimmer that will store your debit card information without your knowledge whenever you use a machine.

STEALING DOCUMENTS:

Criminals may steal your bank statements and other financial mail. They can do so by stealing from the bank, or by going through trash to obtain any personal information that has been thrown away.

FRAUD

Precautions Against Fraud

Everyone can take the following precautions to decrease the chances of becoming a victim of fraud:

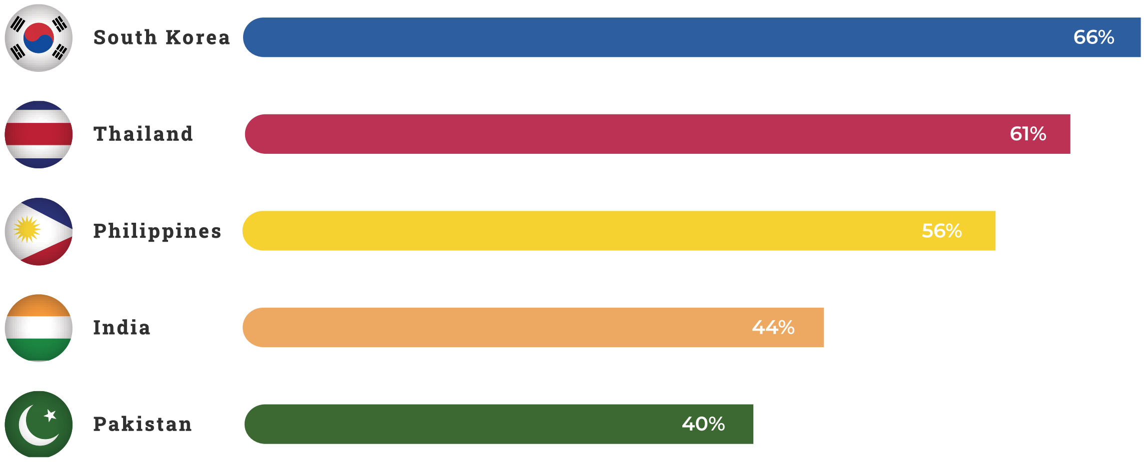
- Treat personal information like a valuable asset, and never provide it at someone's request. Note that sometimes, the scam call or message may even come from an official looking number, known as a Universal Access Number (UAN).
- If someone uses tactics like fear or the promise of new services to create a sense of urgency, remain composed and careful.
- Periodically check your accounts and immediately report any unauthorized transactions.
- Make sure to have different passwords for different apps and websites. Even if one of these passwords is stolen, a person's entire digital identity will not be endangered. Additionally, change your passwords regularly.
- Use antivirus and anti-malware software on your computer and keep it up to date.
- Be cautious about financial documents and do not leave them scattered around the house or in the office. If documents have to be thrown away, they should be shredded properly before they are disposed.

CAREER PLANNING

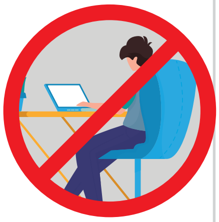
Career planning is a crucial aspect of achieving professional success. It involves identifying one's interests, skills, and goals and determining the steps required to achieve them. In today's fast-paced and ever-changing world, it is essential to start developing skills that are considered valuable as early as possible. Many successful entrepreneurs actually started learning relevant skills and working on their business ideas while they were still teenagers.

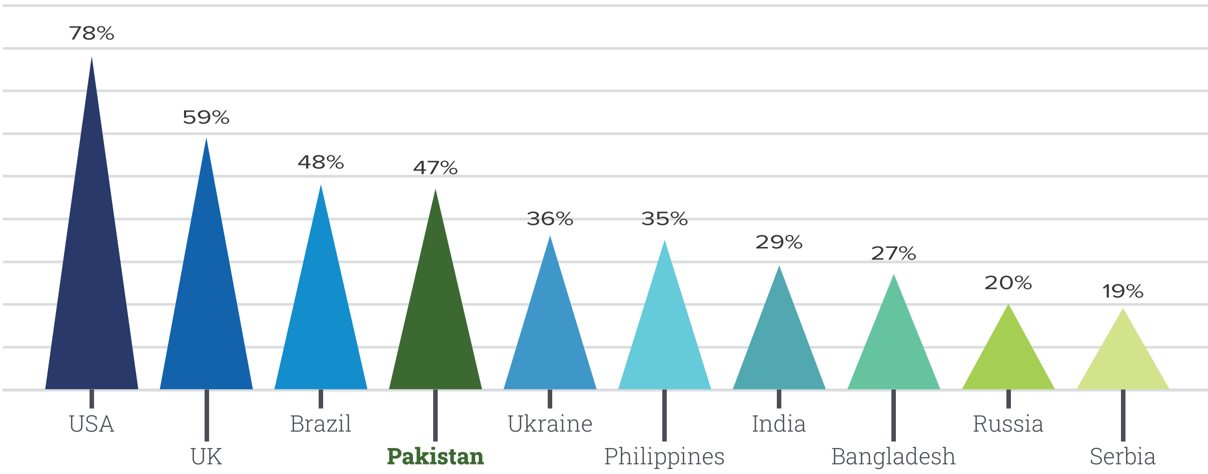
Before discussing these relevant skills, let us take a look at some statistics about the current state of work in Pakistan and the future of work.

- Pakistan's readiness for automation in the workplace is 40%, among the lowest in the Asia-Pacific region.



- More than 90% of the population in Pakistan lacks basic Information and Communication Technology (ICT) skills.
- Internet users in the country have increased from around 17 million in 2012 to 83 million in 2022.
- In 2022, the country generated 500 million US dollars from freelancing, ranking it as the fourth fastest-growing market in the world for freelancers.





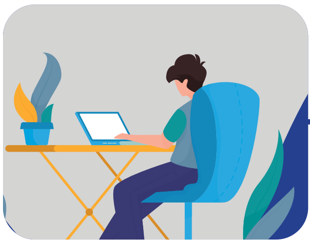
CAREER PLANNING: ESSENTIAL PROFESSIONAL SKILLS

CRITICAL THINKING

Analyze information and ideas to make informed decisions.

PROBLEM-SOLVING

Identify problems and find effective solutions.



TECHNOLOGY USE, MONITORING, AND CONTROL

The ability to use, monitor, and control technology is in high demand. Stay up to date with the latest technological developments in your industry to be effective and efficient.

CREATIVITY AND IDEATION

Creativity and ideation refer to the ability to generate new and original ideas, and to think outside the box to come up with innovative solutions.

LEADERSHIP AND SOCIAL INFLUENCE

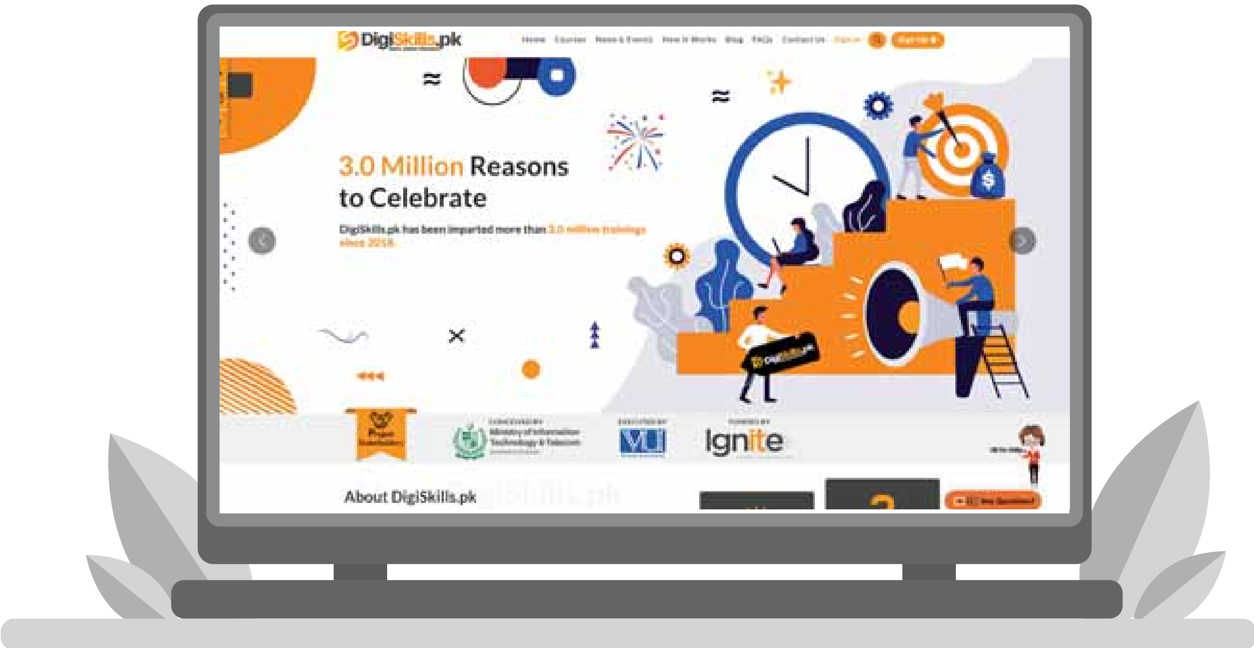
Being able to lead and influence others can help individuals stand out and advance in their careers. A key skill needed is the ability to collaborate with anyone.

DATA ANALYSIS AND INTERPRETATION

Data analysis and interpretation skills can help individuals make informed decisions, identify trends, and improve their work.

PLAN YOUR CAREER

Digiskills.pk—launched by the Ministry of Information Technology and Telecommunications—is a website that provides free upskilling courses for the most in-demand skills.



Whenever you have access to the internet, browse this website and identify the three courses that you would like to take to enhance your professional skills: *Also write a brief description of why you chose each course and how it will enhance your skills.*

Course	Reasons
1.	
2.	
3.	

CAREER PLANNING: ESSENTIAL PROFESSIONAL SKILLS

Specific Skills for Entrepreneurs & Salaried Professionals

ENTREPRENEURS	SALARIED PROFESSIONALS
Have a clear vision for their business and be able to sell their vision to others.	Teamwork and reliability
Willing to take risks and make bold decisions.	Time management
Have knowledge of all areas of business.	Technical skills (such as proficiency in software programs or systems)
Able to network effectively to connect with potential customers, partners, and investors.	Proactively remaining up-to-date with industry standards and practices
Resilience and adaptability (entrepreneurs often face unexpected challenges and must be able to pivot their strategy quickly)	

WRITE YOUR CAREER GOALS

A mission statement is a short paragraph that summarizes the goals and values of a company or individual. Write a personal mission statement of 75 – 150 words that describes your goals for your career. The mission statement can include the following points:

- the industries and sectors that interest you
- your preference between being a salaried professional or an entrepreneur
- the skills and knowledge you will be needing to achieve your goals
- your plan for acquiring these skills and knowledge

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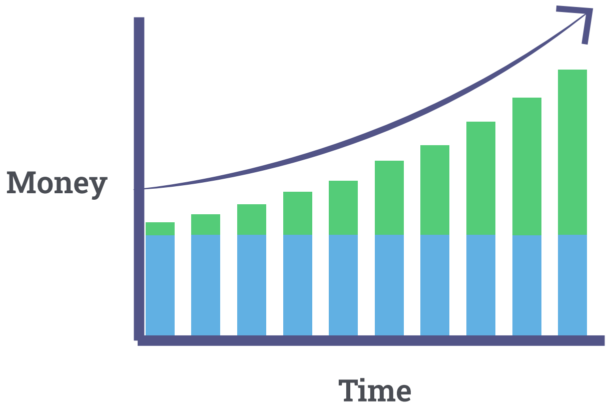
PERSONAL INVESTMENT PORTFOLIO

Types of Assets



When you invest, you place your money in financial assets or securities in the hopes that it will increase in value.

Whether you're just starting out in your career or have been working for a while, investing is a great way of putting your money to work for you.

There are many types of investments, such as stocks, bonds, precious metals, and real estate to name a few. By investing your money, you can benefit from the growth of companies, the stability of government bonds, or the appreciation of precious metals and property.

What is a portfolio?

A portfolio is a collection of investments that you own, and it can help you achieve your financial goals. The key to building a successful portfolio is to diversify, which means spreading your money across different types of investments. This helps you reduce risk and potentially earn a higher return.

PERSONAL INVESTMENT PORTFOLIO

Risk and Reward

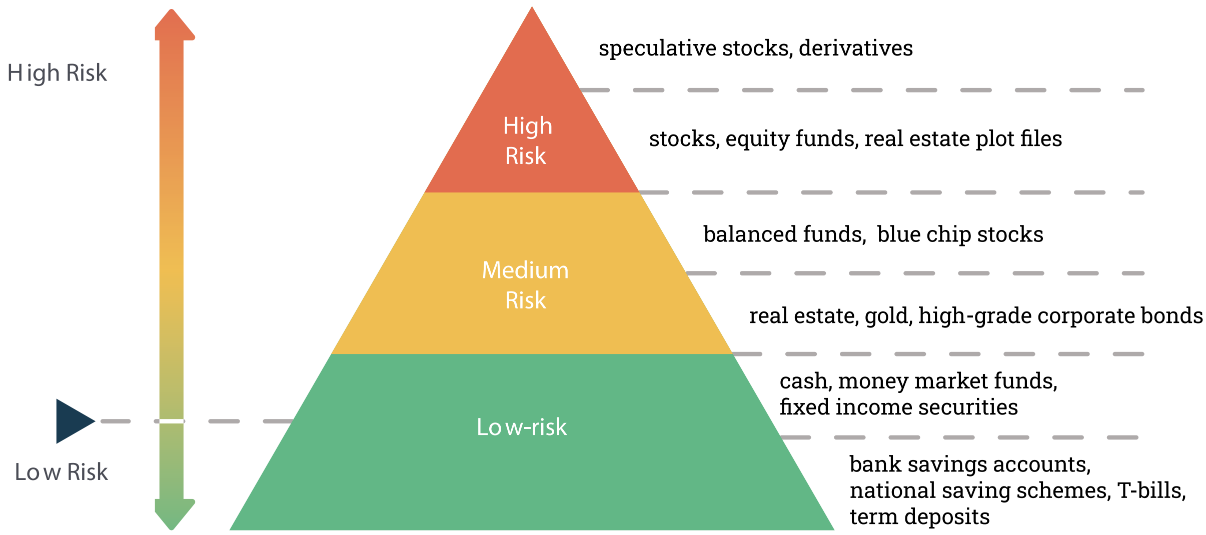
Risk vs reward is a fundamental concept in finance. Taking on more risk usually leads to the potential for higher returns, but it also comes with the possibility of greater losses. The key is to manage that risk by diversifying your portfolio, which simply means not putting all of your eggs in one basket.

When you invest your money, you have the potential to earn a return on that investment. This return is the "reward" that you receive for investing your money. However, investing always involves some degree of uncertainty, which is the "risk" that you take on.

The risk of an investment refers to the chance that you may lose some or all of your money, or that the return on your investment may not be as high as you had hoped. For example, if you invest in a single stock, the value of that stock can fluctuate based on a number of factors, such as market conditions, company performance, and other economic factors. If the stock loses value, you could lose some or all of the money you invested in it.

On the other hand, the potential reward of an investment is the return you can expect to earn if the investment performs well. Different types of investments offer different potential rewards. For example, stocks historically offer a higher potential return than bonds, but they also come with more risk.

It's important to understand the relationship between risk and reward when making investment decisions. Generally speaking, the higher the potential reward of an investment, the higher the risk. This means that if you want to earn a higher return on your investment, you may need to take on more risk.



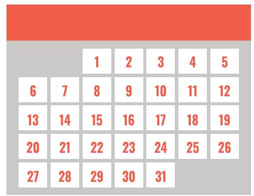
PERSONAL INVESTMENT PORTFOLIO

Diversification

By owning a mix of different investments, you can reduce the impact of any one investment that may not perform well. A well-diversified portfolio can help reduce the impact of market volatility on an individual's investments and improve long-term returns.

Personal Objectives

Risk Tolerance

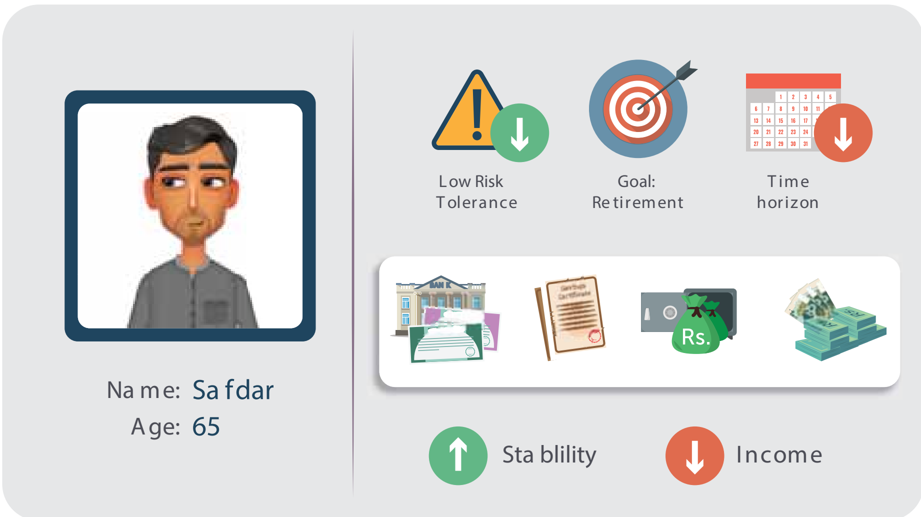


Time Horizon

Your portfolio should be tailored to your personal objectives, risk tolerance, and time horizon. For example, if you're young and have a long time horizon, you may be comfortable taking on more risk in pursuit of higher returns. On the other hand, if you're closer to retirement, you may want to focus on stability and lower risk investments.

Make your own Portfolio

A 65-year-old man who is about to retire may have a low risk tolerance. His portfolio consists mainly of national savings certificates or government bonds, fixed deposits, and cash. These types of investments provide a stable and secure source of income, with little potential for growth.



A 25-year-old woman who is just starting her career has a long time horizon. Her portfolio consists mainly of stocks and mutual funds, with a smaller portion in a bank savings account. These types of investments have the potential to deliver higher returns over the long term, but also come with more volatility in the short term.

Managing your portfolio is about more than just buying and selling investments. It's about regularly reviewing your portfolio to make sure it's still aligned with your goals, risk tolerance, and time horizon. It's also about rebalancing your portfolio when necessary to maintain a good balance of risk and reward.

GLOSSARY

Assets

Any resource that is owned by a person or business that has monetary value of its own and the sale of which can generally be used to meet loan payments.

ATM

An Automated Teller Machine or ATM is a machine operated by a bank that allows you to deposit or withdraw money.

Bank Account

The record that shows how much money a customer has with a bank.

Banking Channels

A bank will reach its customers and provide them with services through many 'banking channels' or pathways. These include branches, kiosks, Automated Teller Machines (ATMs), mobile apps, Internet banking websites, credit and debit cards, retail Point of Sale (POS) systems and customer call centers.

Basket of Commodities

A basket of commodities, or basket of goods, is a collection of consumer products and services which a country uses to track inflation. By tracking the price of everyday items and services like food, clothing and education, a country can keep track of what percentage of their income citizens are spending on these goods over time.

Borrowing

The money or other item of value that you receive for your use and that you plan to give it back to the giver. For example, you could borrow Rs. 5,000 from a bank and return that money to the bank a year later.

Branchless Banking

Customers can use banking services without needing to go to their bank branch, using technologies such as automated teller machines (ATMs), debit cards and mobile phones.

Break Even

Break even means, in relation to a business, the point at which income and expenses equal each other. Often, in the early years of a business, expenses will be more than income. Once there are enough customers and income increases, a well-managed business will get to break even. At this point, income and expenses equal each other. Business owners plan for businesses to get to break even as fast as possible.

Budget

A budget is an estimate of income and expenses over time. In the case of an individual or family budget, the budget will also contain an estimate of savings (income less expenses). In the case of a business budget, the budget will also contain an estimate of profit or loss (income less expenses).

Capital Expenditure

A capital expenditure is money spent by a business to purchase things that can be used over a long period of time. For example, land, buildings and production machinery are types of capital expenditures.

Charity

To give money or services to help those in need, without looking for anything in return. For example, it will be an act of charity if you give money for poor earthquake victims to rebuild their homes.

Credit Cards

Banks issue plastic cards to their customers which may be used to make payments. Credit cards enable customers to make payments by borrowing money from the bank.

Debit cards enable customers to make payments by withdrawing money they have in deposit with the bank.

Conventional Finance

Conventional finance refers to the system of finance developed in the West and common throughout the world today. Interest-based financing is a central part of this system.

Counterfeit

Counterfeit refers to something that is an exact imitation of a valuable original thing, made specifically with the intention to deceive. Counterfeit money is fake currency, printed by criminals to deceive others.

Current Accounts

These are bank accounts in which customers can freely deposit and withdraw money. Usually, customers do not earn a profit or mark-up on the money deposited in current accounts.

Debit Cards

Banks issue plastic cards to their customers which may be used to make payments. Debit cards enable customers to make payments by withdrawing money they have in deposit with the bank. Credit cards enable customers to make payments by borrowing money from the bank.

Deposit

Money put into a bank by a customer for safe-keeping. Some deposits earn a profit for the customer.

Earnings

The money or other item of value you receive for services, benefits or investments you provide. Earning is a type of income. For example, you may have a job in which your earnings as wages are Rs. 20,000 per month. As another example, you may invest Rs. 10,000 in a government bond in which you receive earnings as a mark-up or profit of Rs. 1,000 per year.

Expenses

The money you spend. For example, an individual's expenses may include house rent, food and sweets. As another example, a business' expenses may include office rent and salaries of employees.

Finance Economy

The part of the economy that is concerned with the provision, sale and purchase of financial products and services, as opposed to the real economy, which is concerned with actually producing goods and services.

Financial Literacy

Financial literacy refers to the skill of a person in handling financial and commercial matters, such as in relation to earning, spending, saving, borrowing, investing, buying, selling, budgeting and planning. A person who is financially literate will make better decisions and plans in relation to financial matters.

Fixed Expense

A fixed expense is an expense that is the same over different periods. For example, if you need to pay rent for your house of Rs. 10,000 every month, then rent is a fixed expense. Individuals, families and businesses can all have fixed expenses.

Fixed Income

An item of fixed income is an item of income that is the same over different periods. For example, if you receive a salary of Rs. 20,000 every month, then you are receiving a fixed income. Individuals, families and businesses can all have items of fixed income.

Gift

The money or other item of value that you receive from a giver who does not want anything back. For example, people give gifts to each other at Eid or other special religious days.

Harvest

The process of gathering fruit or crops when they are ripe or ready to be eaten.

Income

The money or other item of value you receive. Income may be in the form of: (1) wages from a job; (2) profits from a business; (3) earnings from an investment or bank deposit; (4) gifts from someone; and (5) benefits from the government. For example, you could have a monthly income of Rs. 20,000 from a job.

Installment or Loan Installment

In the case of a loan, an installment represents a part of the loan amount that must be repaid on a specified time. For example, a lender may lend on January 1 Rs. 8,000 and want the loan amount to be repaid in four equal installments at the end of each calendar quarter. In this case, the borrower must repay the money in four installments: (1) Rs. 2,000 on March 31; (2) Rs. 2,000 on June 30; (3) Rs. 2,000 on September 30; and (4) Rs. 2,000 on December 31.

Invest

To make an investment or put money or something else of value in a business or other project to set it up or help it to grow . For example, if a person puts in Rs. 30,000 to set up a business, we could say: "He invested Rs. 30,000 in the business."

Investment

The money that you use to make more money. For example, an individual may put money into a business as an investment. Buying shares of companies and government bonds are also types of investment.

Leasing

Leasing means to give someone the right to use a physical property (such as land, a building or a car). Usually, the leasing right is given for a specific purpose and time and a specified fee (called a 'rental fee'). In a leasing arrangement, the person giving the lease is called a 'lessor' and the person receiving the lease is called a 'lessee'. The lessor remains the owner of the physical property.

Liabilities

A liability is a financial debt, loan or obligation owed by a person or company to another party, and is settled through the transfer of money, assets or goods and services.

Licensing

Licensing means to give someone the right to use an intellectual property (such as software or a movie or book or invention) or other right (such as a government ownership of the radio wave spectrum). Usually, the licensing right is given for a specific purpose and time and a specified fee (called a 'royalty'). In a licensing arrangement, the person giving the license is called a "licensor" and the person receiving the license is called a "licensee". The licensor remains the owner of the intellectual property or right.

Loan

The amount of money that is lent by one person to another. For example, a bank may make a loan to a person so that the person can buy a motorcycle. The amount that is lent is also called the 'principal amount' of the loan.

Loan Amount

The loan amount (also called 'principal') of a loan is the amount of the loan. For example, if a lender lends someone Rs. 12,000, the loan amount or principal is Rs. 12,000.

Loan Period

The period of time over which a loan must be repaid. For example, a lender may lend on January 1 Rs. 8,000 and want the loan amount to be repaid in four equal installments at the end of each calendar quarter. In this case, the loan period is January 1 – December 31 or one year.

Loss

The amount of money you lose in a business. For example, if your business has income of Rs. 5,000 and expenses of Rs. 7,000, you will have a loss of Rs. 2,000. If you gain money in a business, the amount of money you gain is called a 'Profit'.

Mark-Up

'Mark-up' is a per annum rate applied to a loan that represents the lender's profit or earnings. For example, a lender may lend for one year Rs. 12,000 with a mark-up of 10% per annum. In this case, after one year the borrower will need to (1) repay Rs. 12,000 as the loan amount PLUS (2) pay Rs. 1,200 (10% of 12,000) as the mark-up or interest.

Mobile Banking

This is a service offered by banks that allows customers to use their mobile phones to use banking services such as transferring money.

Necessary Expenses

Expenses that are necessary or important and that cover things you need. For example, an individual's necessary expenses may include expenses relating to food and rent.

Negotiate

Agreement of terms or price through a discussion.

Operating Expense

An operating expense is money spent by a business to operate on a regular basis. For example, a fruit shop will have operating expenses in the form of rent, fruit purchases and salaries.

Outstanding Principal Amount

The amount of money that a lender loans to a borrower is called the 'principal amount'. The 'outstanding principal amount' of a loan is the original principal amount less the amount that has already been paid back. For example, if a lender has loaned Rs. 1,000 to a borrower, and the borrower has repaid Rs. 600 of that original principal amount, the outstanding principal amount will be Rs. 400.

Pocket Money

It is a small amount of money regularly given to children, by their parents, to spend or save for their wants. This is also known as an 'allowance' and given on a weekly or monthly basis.

Principal

In the case of a loan, the loan amount (also called 'principal') of a loan is the amount of the loan. For example, if a lender lends someone Rs. 12,000, the loan amount or principal is Rs. 12,000.

Profit

The amount of money you gain in a business. For example, if your business has income of Rs. 5,000 and expenses of Rs. 4,000, you will have a profit of Rs. 1,000. If you lose money in a business, the amount of money you lose is called a 'Loss'.

Profit Share

It is the dividing of profits made by a business or company based on pre-determined percentages between investors. This investment can either be financial or work; in terms of time and/ or effort.

Real Economy

The part of the economy that is concerned with actually producing goods and services, as opposed to the financial economy, which is concerned with the provision, sale and purchase of financial products and services.

Reward

Something you get for your effort, achievement or investment. In finance, calculation of reward is typically balanced by calculation of risk. You should not take a financial risk unless there is a greater financial reward. For example, if you invest money in shares on the stock market you take the risk that the price of the shares will go down. You should take this risk only if you can estimate that you could also get a high reward if the price of the shares will go up.

Risk

The chance or danger that something bad may happen or a loss may occur. In finance, risk is often used to refer to the chance that there may be a financial loss. For example, if you invest money in shares on the stock market you take the risk that the price of the shares will go down. In finance, calculation of risk is typically balanced by calculation of reward. You should not take a financial risk unless there is a greater financial reward.

Salary

A regular fixed payment paid by an employer to an employee, usually on a monthly basis.

Savings

The money or other item of value that you own and keep for use at a later time. For example, if in one month you have income of Rs. 1,000 and you have expenses of Rs. 800, you will a saving of Rs. 200. You could save money at home or in a bank.

Savings Accounts

These are bank accounts in which customers deposit money in order to save. Customers earn a profit or mark-up on the money deposited in savings accounts.

Savings Goal

A savings goal is a goal someone sets to save money. A well thought out savings goal will include: (1) purpose (what you want to buy with the savings); (2) amount (how much you want to save); and (3) time (by when you want to have reached the savings amount).

Savings Plan

The plan to save some money. A savings plan has a goal (i.e., how much money you want to save over a period of time). The goal may be met over a period of time. For example, if your goal is to save Rs. 3,000 and you save Rs. 1,000 every month, you will meet your goal in three months.

Terms

The details at which a seller will sell you something. For example, a seller may sell you a schoolbag for Rs. 500. She may say she can only give it to you one week later. She may also say she will give you the money back if there is something wrong with it. The timing of the sale of the bag and the promise to give back the money are the 'terms' of the sale.

Unnecessary Expenses

Expenses that are unnecessary or unimportant. These expenses usually are for things you 'want' but may not 'need'. For example, an individual's unnecessary expenses may include expenses relating to sweets and toys.

Variable Expense

A variable expense is an expense that changes over different periods. For example, if you have food expenses of Rs. 8,000 in one month, Rs. 7,000 in the second month, and Rs. 7,300 in the third month, then food is a variable expense. Individuals, families and businesses can all have variable expenses.

Variable Income

Variable income is an item of income that changes over different periods. For example, if you have profit from a business of Rs. 50,000 in one month, Rs. 70,000 in the second month, and Rs. 70,300 in the third month, then profit is an item of variable income. Individuals, families and businesses can all have items of variable income.

Wages

An amount of money an employee is paid based on the number of hours or days they have worked.

Withdrawal

Money taken out by a customer from a bank. Any money withdrawn by a customer comes out of the customer's bank account.

SOLUTIONS

POMEGRANATE JUICE
WORKBOOK

Income: Income and expenses

		Income	Expense
1.	Rabia buys vegetables for dinner.		✓
2.	Safdar sells 40 kg of fruit on Thursday.	✓	
3.	Ali gets pocket money from his mother, Nusrat. (What is this from Ali's point of view?)	✓	
4.	Nusrat gives her son Ali pocket money. (What is this from Nusrat's point of view?)		✓
5.	Safdar's fruit shop has sales of Rs. 80,000 in January.	✓	

Note: When Nusrat gives her son, Ali, pocket money, it is income from his point of view and an expense from her point of view. If you look at the family finances as a whole, it is an expense.

Income: Shereen and Ali's profit and loss

Profit and Loss (Rs.)		
	Category	Year 1
Income		
1.	Total fruit (kg)	**210**
2.	Fruit price per kg	200
3.	**Total income**	**42,000**
Expenses		
4.	Total fruit (kg)	210
5.	Transport expenses (per kg)	100
6.	**Total expenses**	**21,000**
7.	**Profit (Loss)**	**21,000**

SOLUTIONS

POMEGRANATE JUICE
WORKBOOK

Income: Juice business

Profit and Loss (Rs.)		
	Category	**Year 1**
Income		
1.	Total fruit (kg)	210
2.	Fruit price (per kg)	200
3.	Juice price (per kg)	400
4.	% sold as fruit	60%
5.	% sold as juice	40%
6.	Income from fruit sales	**25,200**
7.	Income from juice sales	**33,600**
8.	Total	**58,800**
Expenses		
9.	Total fruit (kg)	210
10.	Transport expenses (per kg)	100
11.	Total transport expenses	21,000
12.	Juice equipment expenses	**12,000**
13.	Total	**33,000**
14.	Profit (Loss)	**25,800**

SOLUTIONS

POMEGRANATE JUICE
WORKBOOK

Income: Risks and rewards of two businesses

1. Which business needs more investment and how much more?

The juice business needs more investment as it needs a juice machine for Rs. 12,000.

2. Which business involves more reward, or profit?

The juice business because the juice sells at Rs. 400 per kg of fruit, but fruit by itself sells at Rs. 200 per kg.

3. Which business involves more risk?

The juice business because it needs an extra investment of Rs. 12,000.

4. What is the relationship between risk and reward? Does higher risk always lead to higher reward?

Often, higher risk can lead to higher reward. But this is not always so. You could take more risk and not get a reward. To take risks in line with rewards you must engage in financial planning, as Shereen and Ali are doing.

Investment: Profit sharing and fairness

1. Should Shereen and Ali have divided the profits by financial investment only or by financial investment plus work?

This is a question that needs judgment. You may decide one way or another. We believe that Shereen and Ali were correct in dividing the profits by financial investment plus work. Shereen's extra work should be rewarded.

2. Which approach is more fair? Why?

We believe that dividing the profits by financial investment plus work is more fair. This is because Shereen has put something extra into the business. She cuts the fruit, removes the seeds and makes the juice. She should receive an extra share of profits for this important work.

3. Which approach makes more financial sense? Why?

We believe that dividing the profits by financial investment plus work makes more financial sense. This is because Shereen does work that is very important to the business. She cuts the fruit, removes the seeds and makes the juice. If this is not done, the business may have to close. It makes financial sense that Shereen should receive an extra share of profits for this important work. If not, she may have less of a reason to do extra work. This may not be good for the business.

4. Would your answer be different if Shereen was taking a salary for her work?

Yes. If Shereen was receiving a salary for her work, she would already be getting something extra. Plus, her salary will be an expense of the business. With this extra expense, the profits of the business will go down. So, if Shereen receives a salary, there is less reason that profits should be divided by financial investment plus work.

SOLUTIONS

PLANNING FOR UNIVERSITY WORKBOOK

Savings: Types of goals

	Person	Amount to be saved (Rs.)	Amount saved each month (Rs.)	How many months	Short- Medium- or Long-term?
1.	Rabia	25,000	2,083	12	**Medium**
2.	Safdar	100,000	5,000	20	**Medium**
3.	Daniyal	2,500	1,250	2	**Short**
4.	Shereen	400,000	6,666	60	**Long**

Savings: Setting a savings goal

Children University Expenses (Rs.)										
	Child	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Total**
1.	Shereen	-	-	300,000	300,000	300,000	300,000	-	-	**1,200,000**
2.	Daniyal	-	-	-	-	300,000	300,000	**300,000**	**300,000**	**1,200,000**
3.	**Total**	**-**	**-**	300,000	300,000	600,000	600,000	**300,000**	**300,000**	**2,400,000**

SOLUTIONS

PLANNING FOR UNIVERSITY WORKBOOK

Savings: Calculating annual savings

	Child	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Total
1.	Shereen	-	-	300,000	300,000	300,000	300,000	-	-	1,200,000
2.	Daniyal	-	-	-	-	300,000	300,000	300,000	300,000	1,200,000
3.	**Total**	**-**	**-**	**300,000**	**300,000**	**600,000**	**600,000**	**300,000**	**300,000**	**2,400,000**
4.	Annual savings	**300,000**	**300,000**	**300,000**	**300,000**	**300,000**	**300,000**	**300,000**	**300,000**	**2,400,000**

The children's total university expenses are different each year:

- In each of Years 1 and 2, they are Rs. 0.
- In each of Years 3, 4, 7 and 8, they are Rs. 300,000.
- In each of Years 5 and 6, they are Rs. 600,000.

The total expenses are Rs. 2,400,000. Because the family has started saving before university expenses have started, they can save Rs. 300,000 per year (2,400,000 / 8) and meet their savings goal.

SOLUTIONS

PLANNING FOR UNIVERSITY WORKBOOK

Savings: Understanding family budgets

1. What is their total net savings in 3 months?

Their total net saving in 3 months is Rs. 60,000 (23,000 + 6,192 + 30,808).

2. If this pattern is the same for the whole year, how much will they save in one year?

They will save Rs. 240,000 (60,000 x 4).

3. Which income line shows the most variable income? Why?

Safdar's income from the fruit shop. Because this is profit from a business. This typically goes up and down depending on sales, expenses, etc.

4. Which income is a fixed income?

Rabia's income from teaching. This is a fixed salary.

5. Which two expenses are fixed expenses?

Rent and education expenses.

6. If they want to save more, which expense line can they reduce the easiest?

Clothes, entertainment and gifts, because these may include unnecessary expenses.

Expenses: Will Shereen's family make money?

		Earns Money	Does NOT Earn Money
1.	Shereen buys a notebook for her school homework.		✓
2.	Shereen spends money to print a poster that invites students to take tuitions from her.	✓	
3.	Ali spends money to put fertilizer on a fruit tree from which he will sell the fruit.	✓	
4.	Ali spends money to put fertilizer on a fruit tree from which he will eat the fruit.		✓
5.	Nusrat buys a sewing machine to make clothes to sell.	✓	
6.	Nusrat buys a sewing machine to make clothes for Ali and herself.		✓

SOLUTIONS

PLANNING FOR UNIVERSITY
WORKBOOK

Expenses: Dealing with necessary and unnecessary expenses

There is no one right answer to this question, but some of the expenses in “Clothes, entertainment, gifts, etc.” are more unnecessary. For example:

Some savings could be had from sweets, toys and bangles earrings, etc.

Savings could also be had from clothes, especially if clothes can be stitched at home.

Perhaps travel expenses could be cut a little bit.

Cigarettes are an expense that most people can do without.

Is charity (money to deserving people) necessary or unnecessary? Charity is an important expense!

How about pocket money? What would a child feel?

Often, it is useful for family members to share cuts in expenses!

Savings: Bank Vs. Home

		At Home	In a Bank
1.	Safety		✓
2.	Makes money		✓
3.	Easy to transfer money to another city		✓
4.	Easy to get to money	✓	
	Where should she save her money?		✓

SOLUTIONS

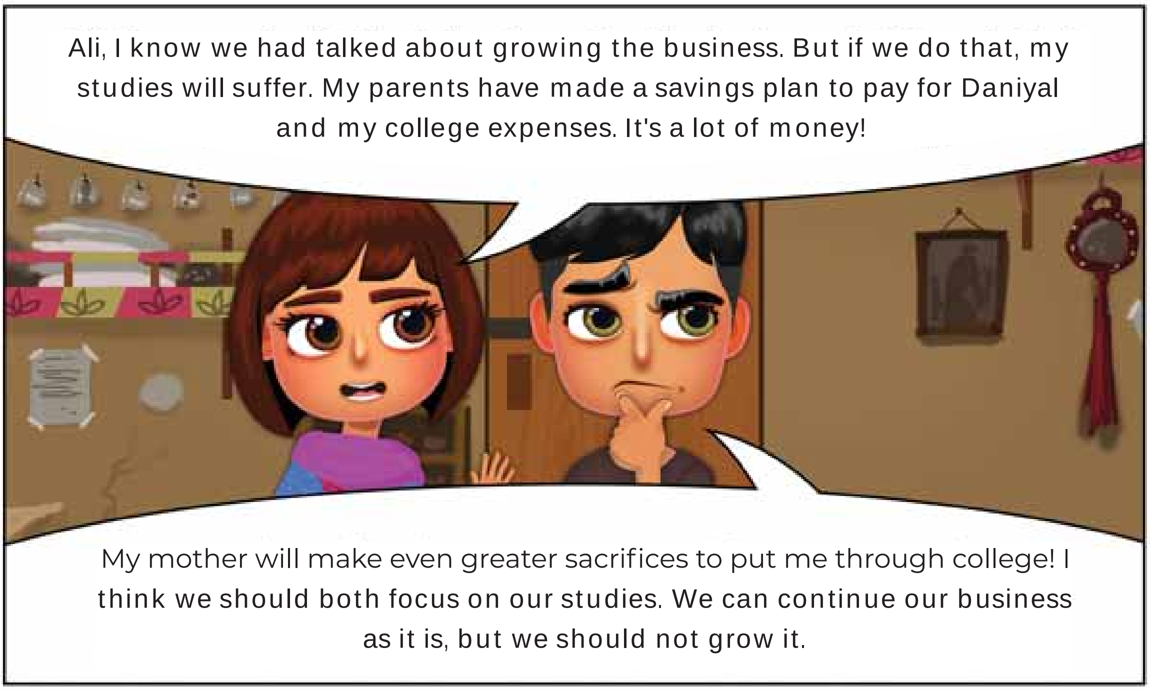
PLANNING FOR UNIVERSITY WORKBOOK

Inflation: Thinking about inflation

	Statement	True	False
1.	Rabia has a fixed salary of Rs. 20,000 per month. If there is inflation, she will be able to buy more things with that salary.		✓
2.	Shereen can buy a book for Rs. 200 today. If there is inflation, the same book will cost more in the future.	✓	
3.	Shereen wants to save money to buy a book in 1 year. The book costs Rs. 200 today. If there is 10% inflation of the price of the book every year, she will need to save Rs. 220.	✓	
4.	Safdar increases the sale price of his fruits at the rate of inflation every year. This means the income from his shop will go down every year.		✓

SOLUTIONS
FROM FRUIT TO JUICE
WORKBOOK

Financial Planning: Education Goals



1. Did Shereen and Ali make the right decision? Should they instead have focused on making more money to help their parents save for university?

There is a matter of judgment. We believe that Shereen and Ali made the right decision. If they focused on making money, their studies might have suffered. Even if they helped their parents meet their savings target, they would be less prepared for university. They might not have been able to take full advantage of a university education.

2. Is getting a higher education (university and beyond) becoming more important to succeed in life? If so, why?

Getting a higher education is becoming more and more important to succeed in life. We live in the information age. In this age, computing, finance, business, medicine, law and many other areas of work are getting more and more complicated. They are also very quickly. People with good educations have a much better chance of succeeding in this age.

3. Is a higher education (university and beyond) only important if you want to make a lot of money?

No. A higher education can help you in many ways. It can certainly help you make money and get high paying jobs. But some people want to achieve excellence in their work, not just make money. A higher education helps you achieve excellence more easily. Other people want to help others. A higher education helps you have a bigger positive impact, and serve more people.

SOLUTIONS

FROM FRUIT TO JUICE
WORKBOOK

Purchasing: Smart buying

		Quality	Quantity	Price	Terms
1.	"If we lend you money, you will need to pay it back in two years."				✓
2.	"I will sell this equipment to you for Rs. 12 lakhs."			✓	
3.	"If the equipment does not work we will fix it for free."				✓
4.	"I want the best functioning equipment."	✓			
5.	"May I pay for the equipment 30 days after you deliver it?"				✓
6.	"I want 4 juice makers."		✓		
7.	"We will deliver the equipment to your shop."				✓

SOLUTIONS

FROM FRUIT TO JUICE
WORKBOOK

Banking: Knowing the State Bank

	True	False
1. The State Bank issues Pakistan's currency (rupees).	✓	
2. The State Bank loans money to businesses and individuals.		✓
3. The State Bank manages Pakistan's foreign currency reserves.	✓	
4. The State Bank sets electricity and gas prices in Pakistan.		✓
5. The State Bank owns all the banks in Pakistan.		✓
6. The State Bank regulates all the banks in Pakistan.	✓	

1. The State Bank issues Pakistan's currency and controls the amount of currency in circulation.
2. The State Bank does not loan money to businesses and individuals. It regulates banks and other financial institutions which loan money.
3. The State Bank manages and invests Pakistan's foreign currency reserves.
4. The State Bank is not responsible for setting electricity and gas prices in Pakistan.
5. The State Bank does not own the banks in Pakistan. It regulates banks and other financial institutions in the country.
6. The State Bank regulates and supervises banks and other financial firms to make sure that they are managed soundly.

SOLUTIONS

FROM FRUIT TO JUICE
WORKBOOK

Borrowing: Calculate installment payments and mark-up

Loan Payable in 2 Installments with Mark-Up (Rs.)				
1.	Date of Loan	January 1, 2020		
2.	Loan Amount	1,200,000		
3.	Loan Period	2 years		
4.	Mark-up per annum	15%		
	Installment Date	December 31, 2020	December 31, 2021	**Total**
5.	Principal repayment	600,000	600,000	**1,200,000**
6.	Mark-Up payment	180,000	90,000	**270,000**
7.	**Total**	**780,000**	**690,000**	**1,470,000**
Calculating Annual Mark-Up (Rs.)				
8.	Loan at beginning	1,200,000	600,000	
9.	Mark-Up per annum	15%	15%	
10.	Mark-Up payment	180,000	90,000	270,000

Note the following in relation to payment of mark-up:

1. At the end of the first year, you will need to pay mark-up on Rs. 1,200,000, which is the full amount of the loan (1,200,000 x 15% = 180,000).
2. In the second year, Rs. 600,000 of the loan has already been paid. Only Rs. 600,000 needs to be paid. The mark-up will be paid on this amount. So, at the end of the second year, you will need to pay mark-up on Rs. 600,000 (600,000 x 15% = 90,000).

SOLUTIONS

FROM FRUIT TO JUICE
WORKBOOK

Borrowing: Comparing two businesses

Fruit Business Only (Rs.)				
		Year 1	Year 2	Year 3
Income				
1.	Total fruit income	6,875,000	7,507,500	8,186,063
2.	Total juice income	-	-	-
3.	Total income	6,875,000	7,507,500	8,186,063
Expenses				
4.	Total fruit expense	5,600,000	6,203,610	6,822,490
5.	Rent	240,000	264,000	290,400
6.	Electricity, gas & other expenses	235,000	265,000	300,000
7.	Juice bottles and packaging	-	-	-
8.	Loan payments	-	-	-
9.	Total expenses	6,075,000	6,732,610	7,412,890
Profit/Loss				
10.	Profit	800,000	774,890	773,173

Fruit and Juice Business (Rs.)				
		Year 1	Year 2	Year 3
Income				
1.	Total fruit income	6,875,000	7,507,500	8,186,063
2.	Total juice income	4,000,000	5,040,000	6,160,000
3.	Total income	10,875,000	12,547,500	14,346,063
Expenses				
4.	Total fruit expense	7,800,000	8,820,000	10,120,000
5.	Rent	240,000	264,000	290,400
6.	Electricity, gas & other expenses	800,000	1,000,000	1,200,000
7.	Juice bottles and packaging	600,000	756,000	924,000
8.	Loan payments	780,000	690,000	-
9.	Total expenses	10,220,000	11,530,000	12,534,400
Profit/Loss				
10.	Profit	655,000	1,017,500	1,811,663

1. Which business has more income?

The juice and fruit business has more income.

2. Which business has more profit?

The juice and fruit business has more income and more reward that the business that only sells fruit. It has income from juice as well as income from fruit.

3. What happens to profit in the second business in Year 1?

The profit is lower in the second business as loan repayments need to be made.

4. Which business has more expenses and higher risk?

The juice and fruit business has more expenses and more risk. The expenses for (1) fruit and (2) electricity, gas & other expenses go up. Also, there are extra expenses for (1) juice bottles and packaging and (2) loan payments. If income does not keep up with extra expenses, there will be a problem.

5. What happens to profit in the second business in Year 3?

In Year 3, the second business will experience a much higher profit as loan has been paid off.

6. Will Safdar make a good decision if he takes the bank loan and goes into the juice business?

This is a matter of judgment. If Safdar goes into the juice business, his profits will go down in the first year. But, after he completes the loan payments, his profit will be much higher. If Safdar has properly studied whether people will buy juice, he may be better off going into the juice business.

SOLUTIONS

FROM FRUIT TO JUICE
WORKBOOK

Financial Markets and Sources of Financing

Identify the source of financing that applies to each of these 12 situations. Circle the correct option.

1 Shereen and Ali need money to buy a juice machine which will last for three years.

Installment Sales Company	Bank

EXPLANATION: Typically, individuals and businesses get financing to obtain small equipment items from installment sales companies or leasing companies.

2 Safdar wants to buy a motorcycle for his employee but cannot pay all cash.

Leasing Company	Seller Financing

EXPLANATION: Typically, individuals and businesses get financing to obtain small equipment items, motorcycles and cars from installment sales companies or leasing companies.

3 A restaurant buys fruit from a fruit seller and wants to buy now but pay later.

Installment Sales Company	Seller Financing

EXPLANATION: The restaurant is looking for "seller financing" (i.e., the fruit seller should provide financing for the fruit it is selling.)

SOLUTIONS

FROM FRUIT TO JUICE
WORKBOOK

4 Safdar wants to insure the inventory and equipment in his shop.

General Insurance Company	Life Insurance Company

EXPLANATION: Insurance for property and other physical goods is obtained from a general insurance company.

5 A fruit seller with a cart wants some money to buy more fruit to sell.

Bank	Microfinance Bank

EXPLANATION: Microfinance banks provide financing for individuals and small and informal businesses.

6 Safdar has expanded to four shops and needs financing for all the fruit he will need to buy every day.

Bank	Microfinance Bank

EXPLANATION: Banks provide loan financing for business both to buy long-term assets (e.g., a building or heavy machinery) and to meet their needs to buy inventory. In this case, Safdar is looking to finance his inventory. This is also called "working capital financing."

7 Safdar wants to obtain equity financing for his company from as many people as possible.

Stock Exchange	Venture Capital Firm

EXPLANATION: A company that is seeking investment from the public and as many people as possible will seek a listing of its shares on the stock exchange.

SOLUTIONS

FROM FRUIT TO JUICE
WORKBOOK

8 Safdar wants to quickly transfer money through his mobile phone.

Fintech Company	Venture Capital Firm

EXPLANATION: Many fintech companies provide apps for people to quickly transfer money through mobile phones. These services are also provided by the digital arms of banks.

9 Safdar wants to get insurance so that his family are taken care of if something happens to him.

Life Insurance Company	Health Insurance Company

EXPLANATION: Life insurance companies provide policies that pay out money to family members or other specified persons upon the death of an insured person.

10 Safdar wants to pay for a dinner he has had at a hotel but does not have cash.

Credit Card	Microfinance Bank

EXPLANATION: People use credit cards to pay for restaurant meals, cover travel expenses and buy things.

11 Safdar wants to borrow money to build a new house.

Bank	Fintech Company

EXPLANATION: Banks provide mortgage finance for people to buy or build houses or flats.

SOLUTIONS

FROM FRUIT TO JUICE
WORKBOOK

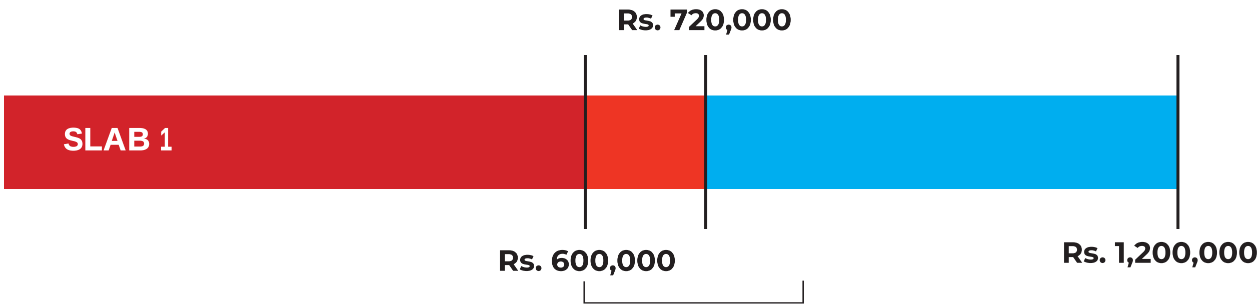
12 Safdar wants to deposit some money and earn a return and after he has saved enough, he will buy a car.

Bank	Leasing Company

EXPLANATION: Banks accept deposits from customers and provides them with earnings on these deposits.

SOLUTIONS

Taxation: Calculating tax



In the image above, Daniyal earns Rs. 720,000 a year, which is Rs. 60,000 every month.

Based on the table explaining the slabs, can you calculate how much tax Daniyal should pay in 2023? Fill out the blanks in the steps below:

Step 1:

Identify taxable amount based on the slab:

Salary:	Rs. 720,000
Minimum slab amount:	Rs. 600,000
Amount in excess:	**2.5**

Step 2:

Calculate the taxable income tax amount:

$$\frac{2.5 \times 120{,}000}{100}$$

$= \mathbf{3000}$

SOLUTIONS

FROM FRUIT TO JUICE
WORKBOOK

Insurance: Types of insurance

Match the type of insurance with the personal circumstances of the customer:

Circumstances

A

Person A is a single breadwinner in her home. She has two children and wants to provide them financial support in the event of her death.

B

Person B is a car owner who wants to be protected against the cost of repair in the event of an accident.

C

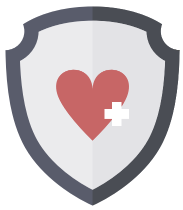
Person C is a farmer with a pomegranate orchard and wants to be financially protected incase his crop is damaged due to natural circumstances.

Insurance Product

General insurance, which would provide coverage for accidents or damage to homes and property, including vehicles.

Crop insurance, which would provide coverage of damage to farms, farmland, or crops that may be caused by natural disasters.

Life insurance, which would provide a lump sum or regulated payments in the tragic event of the death of a family member.



SOLUTIONS

FROM FRUIT TO JUICE
WORKBOOK

Insurance: Types of insurance

If you are a 22 yr. old just starting out a career, which life insurance cover works best for you?

Terms	Big family insurance	City life insurance
Premium	Rs. 10,000 a year	Rs. 15,000 a year
Coverage	Rs. 9,500,000	Rs. 5,000,000
Term	25 years	12 years
Tick the option you would choose	☐	☑

A PROJECT OF THE STATE BANK OF PAKISTAN
& THE ASIAN DEVELOPMENT BANK