UNIT 5

Taxes





Welcome to the Taxes section, where we will delve into the world of taxes and learn how to calculate them. Taxes are mandatory financial contributions imposed by governments on individuals and businesses to fund public services, infrastructure and government operations such as education, healthcare and public transportation. Taxes can vary depending on factors such as income level, applicable tax laws and whether the individual or entity is considered a resident or non-resident for tax purposes.

Let's take a closer look at the different types of taxes. (Please note that tax rates can vary depending on various factors such as income level, jurisdiction and tax laws. The rates used in this unit are fictional and provided for educational purposes).

5.1 Sales Tax

Sales tax is a consumption-based tax that generates revenue for government programs and services. It is usually charged as a percentage of the purchase price at the point of sale and collected by the retailer, who then remits it to the government. The specific rate of sales tax can vary depending on the jurisdiction and the type of goods or services being sold.

Let's try some sales tax questions.

1. A shirt costs $25 before tax. If the tax rate is 7%, what is the total cost of the shirt including tax?
2. A laptop is priced at $800 before tax. If the tax rate is 9%, what is the total cost of the laptop including tax?
3. A pair of shoes costs $65 before tax. If the tax rate is 6%, what is the total cost of the shoes including tax?
4. A book costs $15 before tax. If the tax rate is 8%, what is the total cost of the book including tax?
5. A jacket costs $120 before tax. If the tax rate is 10%, what is the total cost of the jacket including tax?

6 A restaurant bill comes to $45 before tax. If the tax rate is 8%, what is the total cost of the bill including tax?

7 A group dines at a restaurant with a bill of $92.65, including tax. If the tax rate is 9%, what is the total cost of the bill excluding tax?

8 A meal at a restaurant costs $32.10, including tax. If the tax rate is 7%, what is the total cost of the meal excluding tax?

9 Reneigh purchases a t-shirt and the receipt total is $53.25 including sales tax of 6.5%. What is the price of the t-shirt before tax?

10 An item is priced at $120, and the sales tax rate is 7.5%. What is the amount paid in tax?

11 An item is priced at $65, and the sales tax rate is 9.5%. What is the amount of tax paid?

5.2 Tax and Gratuity

In many countries it is customary practice to show gratitude for good service by paying a gratuity or tip. The amount of gratuity is usually based on a percentage of the bill or the level of satisfaction with the service provided. Pay attention to your bill because in some establishments, the gratuity is automatically included in the bill and will normally appear as a separate charge in the itemized list on the bill. If it does not appear on the bill, then it is usually left to the discretion of the customer to decide whether and how much to leave as a gratuity.

Try the following problems.

1 You have a dinner bill of $45 before tax and tip. The tax rate is 7% and you want to leave a 15% tip on the amount after tax. Calculate the total cost of the bill, including tax and tip.

2 You purchase a cake for $35 before tax and tip. The tax rate is 8% and you want to leave a 20% tip on the amount before tax. Determine the total cost of the cake including tax and tip.

3 You have a bill at a restaurant of $75 before tax and tip. The tax rate is 7% and you want to leave a 18% tip on the amount before tax. Find the total cost of the bill, including tax and tip.

4 You order a dessert for $8 before tax and tip. The tax rate is 9% and you want to leave a 20% tip on the amount after tax. Determine the total cost of the dessert, including tax and tip.

5 You have a bill at a café of $50 before tax and tip. The tax rate is 8% and you want to leave a 15% tip on the amount before tax. Find the total cost of the bill, including tax and tip.

6 Your total bill at a restaurant is $120. The tax rate is 6% and you want to leave a 22% tip on the amount before tax. What is the total amount you will pay?

7 You have a dinner bill of $137.33 including 8% tax and 15% tip (on amount before tax). (a) What is the amount of the tax and tip paid? (b) What is the amount of the bill before tax and tip?

5.3 Income Tax

In this section, we will explore the implications of income tax, which can be imposed at different rates according to the tax laws of different jurisdictions and countries. Income tax is typically calculated based on the individual's or business's taxable income. The tax rate varies depending on the income level and the tax brackets set by a government. Understanding income tax is crucial for financial literacy as it helps individuals and businesses plan their finances, budget effectively and meet their tax obligations.

Let's try some income tax questions.

1 In your country, the income tax rates are as follows: 10% for the first $10,000, 15% for the next $10,000, and 20% for any income above $20,000. If a person earns $25,000, what is their income tax liability?

2 Using the tax rates from the preceding question, what is the income tax liability for a person earning $15,000?

3 In Urdovia, the income tax rates are as follows: 5% for the first $8,000, 10% for the next $12,000, and 15% for any income above $20,000. If a person earns $25,000, what is their income tax liability?

4 Using the tax rates from the preceding question, what is the income tax liability for a person earning $10,000?

5 In Mathnasia, the income tax rates are as follows: 15% for the first $20,000, 25% for the next $30,000, and 30% for any income above $50,000. If a person earns $60,000, what is their income tax liability?

6 Using the tax rates from the preceding question, what is the income tax liability for a person earning $15,000?

7 In Finance Island, the income tax rates are as follows: 20% for the first $15,000, 30% for the next $25,000, and 35% for any income above $40,000. If a person earns $50,000, what is their income tax liability?

8 Using the tax rates from the preceding question, what is the income tax liability for a person earning $10,000?

9 In Numbers Island, the income tax rates are as follows: 10% for the first $10,000, 20% for the next $15,000, and 25% for any income above $25,000. If a person earns $30,000, what is their income tax liability?

10 Josh lives in Taxasia, where he earns $118,000 a year and pays 12.5% income tax. The income tax return filing deadline is December 31 of each year. Josh misses the deadline and has to pay a 2% penalty fee on the tax owed. (a) How much income tax does Josh owe (b) What is the amount of the penalty fee he must pay?

11 In the Isles of Finance, the income tax rates are as follows: 10% for the first $15,000, 15% for the next $20,000, and 20% for any income above $35,000. If a person earns $30,000, what is their income tax liability?

12 Using the tax rates from the preceding question, what is the income tax liability for a person earning $10,000?

13 In the United States of Finance, the income tax rates are as follows: 10% for the first $25,000, 15% for the next $30,000, and 20% for any income above $55,000. If a person earns $60,000, what is their income tax liability?

14 Samia lives in Financia, where is must pay 17% tax on the $250,000 she earns per year. She misses the income tax return filing deadline and therefore, has to pay a 5% penalty on the amount of income tax owed. (a) How much income tax does she owe? (b) What is the amount of the penalty fee she must pay?

5.4 Investment Tax

Tax on investments refers to the taxes imposed on the income or gains generated from investments such as stocks, bonds, real estate and other financial instruments. This can include capital gains tax, dividend tax, interest income tax, rental income tax and other applicable taxes depending on the specific investment and the tax regulations of the country.

a. Capital Gains Tax

Please note that these calculations assume that the entire gain is subject to capital gains tax and do not account for any deductions, exemptions, or other factors that may affect the actual tax liability, unless specifically stated.

1 John purchased a stock for $1,000 and later sold it for $1,500. If the capital gains tax rate is 20%, how much capital gains tax will John owe?

2 Sarah sold a piece of artwork for $10,000. She initially purchased it for $8,000. If the capital gains tax rate is 15%, how much capital gains tax will Sarah owe?

3 Mark inherited a property with a fair market value of $200,000. He sold it for $250,000. If the capital gains tax rate is 25%, how much capital gains tax will Mark owe?

4 Emily bought shares in a mutual fund for $5,000 and later sold them for $7,500. If the capital gains tax rate is 10%, how much capital gains tax will Emily owe?

5 Michael purchased a rental property for $150,000 and sold it for $200,000. If the capital gains tax rate is 30%, how much capital gains tax will Michael owe?

b. Dividend Tax

Please note that dividend tax rates can vary based on various factors such as income level, jurisdiction, and tax laws. The rates used in these questions are fictional and provided for educational purposes.

1 Sarah received $1,500 in dividends from her stock investments. If the dividend tax rate is 15%, how much dividend tax will Sarah owe?

2 Mark earned $2,000 in dividends from his mutual fund investments. If the dividend tax rate is 20%, how much dividend tax will Mark owe?

3 Emily received $500 in dividends from her savings account. If the dividend tax rate is 10%, how much dividend tax will Emily owe?

4 Michael earned $5,000 in dividends from his stock portfolio. If the dividend tax rate is 25%, how much dividend tax will Michael owe?

5 David received $10,000 in dividends from his investments. If the dividend tax rate is 30%, how much dividend tax will David owe?



c. Interest Income Tax

Please note that interest income tax rates can vary based on various factors such as income level, jurisdiction, and tax laws. The rates used in these questions are fictional and provided for educational purposes.

1 Sarah earned $500 in interest income from her savings account. If the interest income tax rate is 10%, how much interest income tax will Sarah owe?

2 Emily earned $200 in interest income from her bond investments. If the interest income tax rate is 20%, how much interest income tax will Emily owe?

3 Michael received $2,500 in interest income from his corporate bonds. If the interest income tax rate is 25%, how much interest income tax will Michael owe?

4 David earned $5,000 in interest income from his savings accounts and certificates of deposit. If the interest income tax rate is 30%, how much interest income tax will David owe?

d. Rental Income Tax

Please note that rental income tax rates can vary based on various factors such as income level, jurisdiction and tax laws. The rates used in these questions are fictional and provided for educational purposes.

1 Sarah rented out her apartment and earned $1,200 per month in rental income. If the rental income tax rate is 20%, how much rental income tax will Sarah owe for the year?

2 Mark owns a rental property and receives $2,500 per month in rental income. If the rental income tax rate is 15%, how much rental income tax will Mark owe for the year?

3 Emily is a citizen and resident of Taxnation, where she earns $800 per week in rental income. (a) If the rental income tax rate is 25%, how much rental income tax will Emily owe for the year? If Emily relocates to Mathnation she is considered

to be a non-resident of Taxnation and must now pay 30% tax on this rental income. (b) What is the amount of rental income tax she must pay as a non-resident of Taxnation?

4 David lives in Ice Nation, where he rents out his commercial property for $5,000 per month. (a) If the rental income tax rate is 35%, how much rental income tax will David owe for the year? If David relocates to Sunshine Nation, he will be considered to be a non-resident of Ice Nation and taxed at a rate of 45% on the rental income from his commercial property. (b) What is the amount of tax he will owe as a non-resident of Ice Nation?

5.5 Property Tax

Property tax is a form of taxation imposed by some local governments on property owners, and usually serves as a significant source of revenue that funds essential public services such as schools, infrastructure, public safety, and local administration. Property tax rates and regulations can vary widely depending on the location and jurisdiction, but the fundamental concept remains consistent: property owners are required to pay a certain percentage of their property's assessed value as tax.

Some key points about property tax include:

- Assessed Value: The property tax is typically based on the assessed value of the property. This value is determined by local assessors and reflects an estimate of the property's market value. The assessment process may consider factors like property size, location, improvements and comparable sales.
- Tax Rates: Property tax rates are expressed as a percentage of the assessed value. These rates vary from one locality to another and can be influenced by factors such as budgetary needs, public services, and economic conditions. Rates are often set by local governments, including municipalities, counties and school districts.

- Tax Calculation: To calculate property tax, the assessed value of the property is multiplied by the applicable tax rate. This results in the annual property tax liability. Different jurisdictions might have various exemptions, deductions and caps that can influence the final tax amount.
- Progressive and Regressive Taxation: Property tax systems can be progressive or regressive. Progressive systems involve higher tax rates for higher property values, whereas regressive systems apply uniform rates regardless of property value. Some jurisdictions also offer tax relief measures, such as homestead exemptions or senior citizen discounts, to ease the burden on certain property owners.

Let's try some property tax questions.

1 John owns a property with an assessed value of $250,000. The local property tax rate is 1.2%. Calculate the annual property tax John needs to pay.

2 Sarah's house is assessed at $400,000. The property tax rate is 0.8%. However, homeowners are eligible for a 20% tax exemption. Calculate the annual property tax she needs to pay after the exemption.

3 Alex's property has an assessed value of $180,000. The local property tax rate is 2.5%. However, there is a fixed deduction of $2,000 from the assessed value before applying the tax rate. Calculate the annual property tax.

4 Emily's property has an assessed value of $300,000. The property tax rate is 1.5%, and there's an additional local school tax rate of 0.7%. Calculate the total annual property tax including the school tax.

5 David's property is subject to a progressive property tax rate based on assessed value:

   - For the first $150,000, the tax rate is 1.0%.
   - For the portion above $150,000, the tax rate is 1.5%.

If the assessed value of David's property is $220,000, calculate the annual property tax.

5.6 Inheritance Tax

Inheritance tax is typically calculated based on the value of the inherited asset. Countries have different inheritance tax laws and requirements governing how assets are taxed and transferred upon death of an individual, including the applicable tax rates, exemptions and filing obligations.

Please note that inheritance tax rates can vary based on various factors such as jurisdiction, relationship to the deceased, and tax laws. The rates used in these questions are fictional and provided for educational purposes.

1. Sarah inherited $500,000 from her late relative. If the inheritance tax rate is 10%, how much inheritance tax will Sarah owe?
2. Mark received an inheritance of $2,000,000 from his deceased parent. If the inheritance tax rate is 20%, how much inheritance tax will Mark owe?
3. Emily inherited a property with a fair market value of $1,500,000. If the inheritance tax rate is 15%, how much inheritance tax will Emily owe?
4. Michael received an inheritance of $800,000 in cash and investments. If the inheritance tax rate is 25%, how much inheritance tax will Michael owe?
5. David inherited a business worth $3,500,000 from his late relative. If the inheritance tax rate is 30%, how much inheritance tax will David owe?
6. Sarah inherited a property worth $750,000 and cash assets totaling $250,000 from her deceased relative. If the inheritance tax rate for properties is 10% and for cash assets is 5%, how much inheritance tax will Sarah owe?

7 Mark received an inheritance of $1,500,000 (50% in stocks and 50% in bonds). If the inheritance tax rate for stocks is 15% and for bonds is 20%, how much inheritance tax will Mark owe?

8 Emily inherited a family business worth $2,000,000 from her deceased parent. If the inheritance tax rate for family businesses is 5%, how much inheritance tax will Emily owe?

9 Michael received an inheritance of $800,000, which consists of a house valued at $600,000 and a bank account with $200,000. If the inheritance tax rate for houses is 10% and for bank accounts is 3%, how much inheritance tax will Michael owe?

10 David inherited an estate valued at $3,000,000, which includes real estate worth $2,000,000 and investment portfolios worth $1,000,000. If the inheritance tax rate for real estate is 20% and for investment portfolios is 15%, how much inheritance tax will David owe?

5.7 Corporate Tax

Corporate tax is usually based on the company's taxable income, which is calculated by deducting allowable expenses from the total revenue. The corporate tax rate varies from country to country and can have a significant impact on the company's financial standing and decision-making.

Please note that corporate tax rates can vary based on various factors such as jurisdiction, business type, and tax laws. The rates used in these questions are fictional and provided for educational purposes.

Let's try some corporate tax questions.

1 Marco Corporation has a taxable income of $500,000. If the corporate tax rate is 25%, how much corporate tax will Marco Corporation owe?

2 Gigi Corporation earned $1,200,000 in taxable income. If the corporate tax rate is 30%, how much corporate tax will Gigi Corporation owe?

3 Snacks Corporation has a taxable income of $750,000. If the corporate tax rate is 20%, how much corporate tax will Snacks Corporation owe?

4 Tweezie Corporation earned $2,500,000 in taxable income. If the corporate tax rate is 35%, how much corporate tax will Tweezie Corporation owe?

5 Sundip Corporation has a taxable income of $1,800,000. If the corporate tax rate is 28%, how much corporate tax will Sundip Corporation owe?

6 Lazy Corporation earned $400,000 in taxable income. If the corporate tax rate is 22%, how much corporate tax will Lazy Corporation owe?

7 Macky Corporation has a taxable income of $1,000,000. If the corporate tax rate is 32%, how much corporate tax will Macky Corporation owe?

8 Stylish Corporation earned $3,600,000 in taxable income. If the corporate tax rate is 29%, how much corporate tax will Stylish Corporation owe?

9 UVW Corporation has a taxable income of $550,000. If the corporate tax rate is 27%, how much corporate tax will UVW Corporation owe?

10 JKL Corporation earned $900,000 in taxable income. If the corporate tax rate is 24%, how much corporate tax will JKL Corporation owe?

11 ABC Corporation earned $500,000 in taxable income and has a tax deduction of $50,000. If the corporate tax rate is 25%, calculate the corporate tax liability.



12 Tracks Corporation has a taxable income of $800,000 and a tax credit of $100,000. If the corporate tax rate is 30%, determine the corporate tax liability.

13 MNO Corporation earned $1,200,000 in taxable income and has a tax deduction of $150,000. If the corporate tax rate is 20%, find the corporate tax liability.

14 Fawaz DXB earned AED 3,000,000 in taxable income and has a tax credit of AED 39,500. If the corporate tax rate is 12% what is the company's corporate tax liability?