

تم تحميل هذا الملف من موقع المناهج البحرينية



## كراسة و مذكرة مال 211

موقع المناهج ← المناهج البحرينية ← الصف الثاني الثانوي ← تربية اقتصادية ← الفصل الأول ← مذكرات وبنوك ← الملف

تاريخ إضافة الملف على موقع المناهج: 2024-11-24 10:22:14

ملفات اكتب للمعلم اكتب للطالب | اختبارات الكترونية | اختبارات | حلول | عروض بوربوينت | أوراق عمل  
منهج انجليزي | ملخصات و تقارير | مذكرات و بنوك | الامتحان النهائي للمدرس

المزيد من مادة  
تربية اقتصادية:

## التواصل الاجتماعي بحسب الصف الثاني الثانوي



صفحة المناهج  
البحرينية على  
فيسبوك

الرياضيات

اللغة الانجليزية

اللغة العربية

التربية الاسلامية

المواد على تلغرام

## المزيد من الملفات بحسب الصف الثاني الثانوي والمادة تربية اقتصادية في الفصل الأول

مذكرة مال 111

1

مذكرة تأمين 211

2

ملخص ملف مساند التأمين (تام 211) جميع الوحدات

3

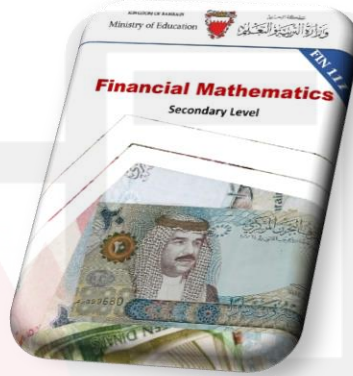


وزارة التربية والتعليم  
مدرسة التعاون الثانوية للبنين  
قسم المواد التجارية

# كراسة الطالب

مقرر مال 111

Financial Mathematics



اسم الطالب: .....

الرقم الأكاديمي: .....

الصف الدراسي: .....

إعداد: أ.علي مكي المرحوش / مراجعة: أ.مرتضى علي درباس

الفصل الدراسي الأول للعام الدراسي 2025/2024م

ملاحظة: الكتاب المدرسي هو المصدر الرئيسي للمذاكرة

رمز المقرر	الشعبة
اسم الطالب	الرقم الأكاديمي

م	التاريخ	الدرجة	التقدير	الوصف	التعزيز	التطوير
1			<input type="checkbox"/> ممتاز <input type="checkbox"/> جيد <input type="checkbox"/> مقبول <input type="checkbox"/> ضعيف	<input type="checkbox"/> أداؤك متقن. <input type="checkbox"/> إجاباتك منسقة. <input type="checkbox"/> وظفت النظريات والقوانين بطريقة صحيحة. <input type="checkbox"/> لديك أخطاء علمية. <input type="checkbox"/> لم توظف النظريات والقوانين بطريقة صحيحة. <input type="checkbox"/> ملفك (دفترك) ناقص. <input type="checkbox"/> ملفك (دفترك) غير مرتب	<input type="checkbox"/> شكرا لك. <input type="checkbox"/> أقدر مجهودك ملفك (دفترك) مرتب وجميل. <input type="checkbox"/> موفق دوما اجتهدك مثمر محاولاتك جيدة.	<p><b>معالجة:</b></p> <input type="checkbox"/> تدرب أكثر على التمارين المشابهة من الكتاب المدرسي. <input type="checkbox"/> كن مهتما أكثر بالتعلم والأعمال الكتابية <input type="checkbox"/> أسأل المعلم أو زميل متعاون معك. <input type="checkbox"/> استعن بمصادر معرفة أخرى. <input type="checkbox"/> نظم ورتب ملفك (دفترك) <p><b>إثراء:</b></p> <input type="checkbox"/> أجب على مسائل مهارات التفكير العليا من الدروس في الكتاب المدرسي. <input type="checkbox"/> تحدى قدراتك في حل المشكلات. <input type="checkbox"/> عزز معلوماتك بمصادر معرفة أخرى.
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الوقفة الأولى

توقيع المعلم:

الوقفة الثانية

توقيع المعلم:

توقيع الطالب:

توقيع الطالب:

توقيع ولي الأمر:

توقيع ولي الأمر:

## الخطة الدراسية

KINGDOM OF BAHRAIN  
Ministry of Education



مملكة البحرين  
وزارة التربية والتعليم

### المحتوى العلمي المطلوب في مقرر الرياضه الماليه للفصل الأول من العام الدراسي 2025/2024م

المسار: توحيد المسارات

المادة/اسم المقرر ورمزها: الرياضه الماليه - مال 111

الصف: المستوى الثاني

اسم الكتاب: **Financial Mathematics**

الملاحظات	الأسبوع	الصفحة (من - إلى)	عنوان الدرس ورقمه	الفصل (الوحدة)
	1	15-27	Lesson 1.1,2,3 Review Numbers ( Write, Place , Round )	1
	2	28 -35	Lesson 1.4 Money Currency System	
	3	39-44	Lesson 2.1 System of Payment Lesson 2.2 Payroll by Hour & Week	2
	4	45-49	Lesson 2.3 Payroll by Piece & Rate Lesson 2.4 Payroll by Commission & Bonus	
Pages 55-58 read only (Lesson 2.6)	5	50-61	Lesson 2.5 Deductions	
	6	65-72	Lesson 3.1 Trade Discount	3
	7	73-76	Lesson 3.2 Cash Discount	
	8	77-84	Lesson 3.3 Value Added Tax (VAT) Lesson 3.4 Tariff in the Kingdom of Bahrain	
	9	85-101	Lesson 3.5,6 Pricing goods Based on (Cost - Selling) Lesson 3.7 Mark -Down	
	10	105-114	Lesson 4.1 The Concept of Simple Interest Lesson 4.2 Formula of Simple Interest & amount Lesson 4.3 Simple Interest ( months - years - months & years)	4
	11	115-119	Lesson 4.3 Simple Interest ( days- Counting Days) Lesson 4.4 Exact and Trade Interest	
	12	120-129	Lesson 4.5 Finding Factors of Simple Interest	

الطبعة المعتمدة: كتاب الرياضه الماليه (مال 111) financial Mathematics الطبعة الأول 2022م

وزارة التربية والتعليم - الفصل الدراسي الأول 2024-2025م

### ملاحظات

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# Unit (1)

## الوحدة الأولى

Review Numbers and Currency Exchange

مراجعة الأرقام وتحويل العملات



### Content:

- ▶ 1.1 Write whole numbers
- ▶ 1.2 Place value and number system
- ▶ 1.3 Round whole number
- ▶ 1.4 Money currency system

# Unit 1

## Review Numbers and Currency Exchange

### مراجعة الأرقام وتحويل العملات

#### 1.1 Write the whole Numbers كتابة الأعداد الكاملة

(A) Read and write whole numbers: اقرأ واكتب الأرقام كاملة

1	One	11	eleven	10	ten	21	twenty-one
2	Two	12	twelve	20	twenty	22	
3		13	thirteen	30		33	thirty-three
4		14		40		44	
5		15		50		55	
6		16		60		66	
7		17		70		77	
8		18		80		88	
9		19		90		99	

100	One-hundred
2,000	Two-thousand
3,000,000	Three-million
4,000,000,000	Four-billion
5,000,000,000,000	Five-trillion

(B) Read decimal numbers: قراءة الأرقام العشرية

•



Decimal Point **النقطة**

,



Decimal Comma **الفاصلة**

0.1	Ten <u>ths</u>
0.01	Hundred <u>ths</u>
0.001	Thousand <u>ths</u>
0.0001	Ten-Thousand <u>ths</u>
0.00001	Hundred-Thousand <u>ths</u>
0.000001	Million <u>ths</u>
0.0000001	Ten-Million <u>ths</u>
0.00000001	Hundred-Million <u>ths</u>

(C) Write the numbers in letters: كتابة الأرقام بالحروف



Examples

(1) Write the number 1, 890, 512. 627 in letters:

Millions			Thousands			Units		Point	Tenths	Hundredths	Thousands

One million, eight hundred ninety thousand, five hundred twelve **and** six hundred twenty-seven thousandths.



## Exercises

(1) Write the number 2, 670, 311. 540 in letters:

Millions			Thousands			Units			Point	Tenths	Hundredths	Thousands

(2) Write the following numbers in letters:

a- 47,203 = .....

b- 5,821,496 = .....

c- 0.375 = .....

d- 4.6 = .....

e- 150 = .....

f- 8921 = .....

g- 1085514 = .....

h- 40.451 = .....

i- 8.15 = .....

j- 1225.4211 = .....

(2) Write the following BD amounts in letters:

a- BD 20.825 = .....

b- BD 0.025 = .....

c- BD 516800 = .....

d- BD 762.150 = .....



**(3) Write the following foreign currency amounts in letters:**

a- \$ 234.75 = .....

b- \$ 175.64 = .....

c- \$ 1,121 = .....

**(4) Write the number of the following:**

a- Twenty billion, fifteen million, two hundred forty.

.....

b- Ten billion, five hundred forty-two million, six hundred thousand.

.....

c- Eight and tenths.

.....

d- Five hundred thirty nine thousandths.

.....

e- One hundred thirty-seven and twenty-three hundredths.

.....

**(5) Write the amounts of the following:**

a- Eight hundred fourteen dollars.

.....

b- Eight hundred fourteen dollars and twenty-one cents.

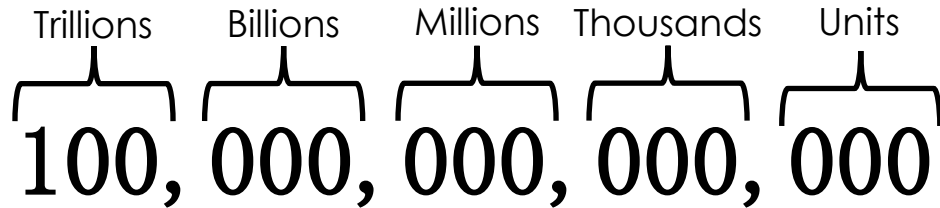
.....

c- Ten thousand four hundred eleven BD and one hundred twenty fils.

.....

## 1.2 Place Value and number system نظام الأرقام وقيمتهم المكانية

(A) Whole numbers and the place-value system: نظام القيمة المكانية للأرقام



### Examples

(1) Find the place value of the number 381, 345, 287, 369, 021

Trillions			Billions			Millions			Thousands			Units		
Hundred Trillion	Ten Trillion	Trillion	Hundred Billion	Ten Billion	Billion	Hundred Million	Ten Million	Million	Hundred Thousand	Ten Thousand	Thousand	Hundred	Ten	One
<b>3</b>	<b>8</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>2</b>	<b>8</b>	<b>7</b>	<b>3</b>	<b>6</b>	<b>9</b>	<b>0</b>	<b>2</b>	<b>1</b>
381 trillion			345 billion			287 million			369 thousand			021		

(2) Find the place value of the number 188, 534, 246, 179, 221

Trillions			Billions			Millions			Thousands			Units		
Hundred Trillion	Ten Trillion	Trillion	Hundred Billion	Ten Billion	Billion	Hundred Million	Ten Million	Million	Hundred Thousand	Ten Thousand	Thousand	Hundred	Ten	One



## Exercises

(1) Find the place value of the following numbers:

- a- 56,326
- b- 8,971,456
- c- 16,080,573
- d- 789,454,002
- e- 3,765,010,783
- f- 54,079,887,546
- g- 200,471,050,120
- h- 4,156,966,432,251
- i- 80,879,674,366,377
- j- 100,025,912,706,454

S. No	Trillions			Billions			Millions			Thousands			Units		
	Hundred Trillion	Ten Trillion	Trillion	Hundred Billion	Ten Billion	Billion	Hundred Million	Ten Million	Million	Hundred Thousand	Ten Thousand	Thousand	Hundred	Ten	One
a															
b															
c															
d															
e															
f															
g															
h															
i															
j															

(B) Decimals and the place-value system: نظام القيمة المكانية للأرقام التي تحتوي على كسور



Examples

(1) Find the place value of the number 12, 315. 6274

Millions			Thousands			Units			Decimal System					
Hundred Million	Ten Million	Million	Hundred Thousand	Ten Thousand	Thousand	Hundred	Ten	One	Decimal point	Tenths	Hundredths	Thousandths	Ten-Thousandths	Hundred-thousandths

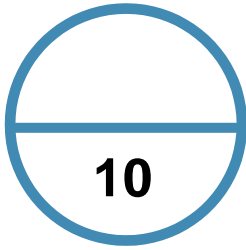


Exercises

(1) Find the place value of the following numbers:

- a- 326.0153
- b- 8,670.451
- c- 15,480.25
- d- 6,450,872.125

S.No	Millions			Thousands			Units			Decimal System					
	Hundred Million	Ten Million	Million	Hundred Thousand	Ten Thousand	Thousand	Hundred	Ten	One	Decimal point	Tenths	Hundredths	Thousandths	Ten-Thousandths	Hundred-thousandths
a															
b															
c															
d															



**Q (1)** Write the following foreign currency amounts in letters: **(2 marks)**

a- \$ 345.22 = .....

b- 0.685 = .....

**Q (2)** Write the number in **letters** or **numbers** for the following: **(5 marks)**

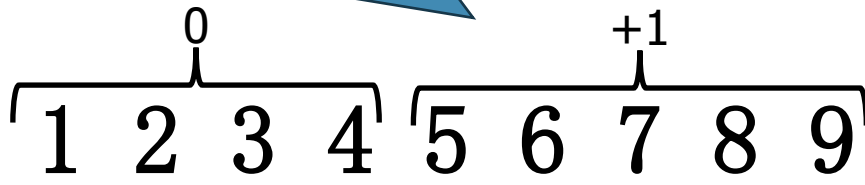
NO	Numbers	Number in letters
a	<b>98</b>	
b	<b>5000,000</b>	
c	<b>0.015</b>	
d		Six hundred twelve and five hundred twenty-seven thousandths.
e		Fifteen dinar and three hundred twenty-five fils

**Q (3)** Find the place value of the number 2,340,285,389.92 : **(3 marks)**


Billions			Millions			Thousands			Units			Decimal System		
Hundred Billion	Ten Billion	Billion	Hundred Million	Ten Million	Million	Hundred Thousand	Ten Thousand	Thousand	Hundred	Ten	One	Decimal point	Tenths	Hundredths

ملاحظة: هذه عينة من أسئلة الإمتحانات النهائية السابقة

### 1.3 Round Whole number تقريب الأعداد

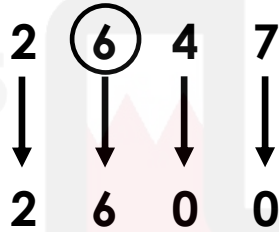


#### بعض الكلمات المهمة

 Nearest Ten	لأقرب عشرة	First digit	أول رقم
Nearest Hundred	لأقرب مئة	More than 5	أكثر من 5
Nearest Thousand	لأقرب ألف	Less than 5	أقل من 5

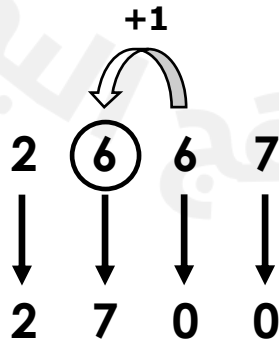
(A) Round whole number: تقريب الأعداد الاعتيادية

► Round **2647** to the nearest hundred.



If this digit is **less than 5**,  
replace it  
and all digits  
to its right  
with ZEROS

► Round **2667** to the nearest hundred.



If this digit is **5 or more**,  
Add **(+1)** to  
the digit in  
the  
specified  
place with  
ZEROS



## Examples

### (1) Round the following numbers:

a- 16 to the nearest ten. = .....

b- 112 to the nearest ten. = .....

c- 644 to the nearest hundred. = .....

d- 1260 to the nearest hundred. = .....

e- 4550 to the nearest thousand. = .....

f- 12690 to the nearest thousand. = .....



## Exercises

### (1) Round the following numbers:

a- 74 to the nearest ten. = .....

b- 341 to the nearest ten. = .....

c- 341 to the nearest hundred. = .....

d- 8539 to the nearest hundred. = .....

e- 4350 to the nearest thousand. = .....

f- 11777 to the nearest thousand. = .....

### (2) Round the following numbers: (★★)

a- 134.9 to the nearest ten. = .....

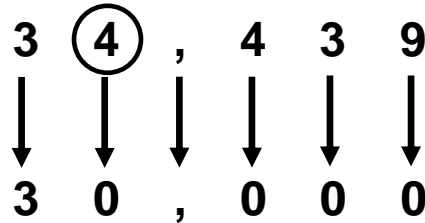
b- 6.098 to the nearest ten. = .....

c- 52,973 to the nearest hundred. = .....

d- 3,784.921 to the nearest thousand. = .....

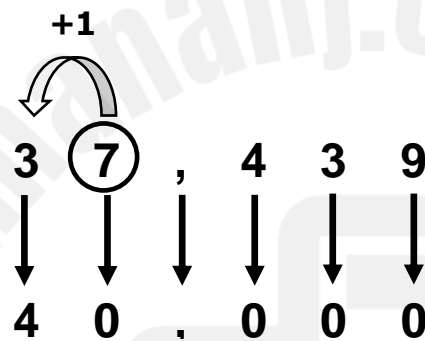
**(B) Round numbers to the first digit: تقريب الأعداد إلى الرقم الأول**

► Round **34,439** to first digit.



If this digit is **less than 5**,  
relace it  
and all digits  
to its right  
with **ZEROS**

► Round **37,439** to first digit.



If this digit is **5 or more**,  
Add **(+1)** to  
the digit in  
the  
specified  
place with  
**ZEROS**

**Examples**

**(1) Round the following numbers:**

a- 1,622,316 to the first digit. = .....

b- 348,889 to the first digit. = .....

**Exercises**

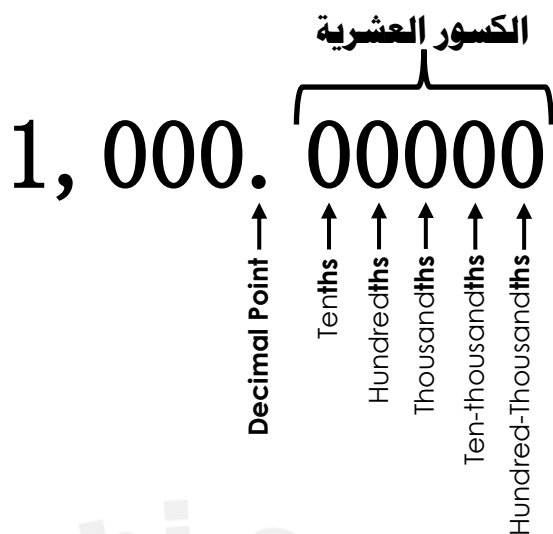
**(1) Round the following numbers:**

a- 29,000,459 to the first digit. = .....

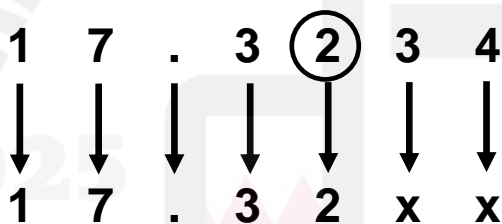
b- 61,748 to the first digit. = .....



(C) Round Decimals: تقريب الكسور العشرية

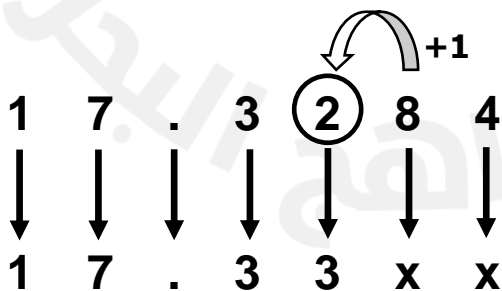


► Round **17.3234** to the nearest **hundredths**.



If this digit is **less than 5**, eliminate it and all digits to its right with **ZEROS**

► Round **17.3284** to the nearest **hundredths**.



If this digit is **5 or more**, Add **(+1)** to the digit in the specified place and eliminate all digits to its right.



## Examples

**(1) Round the following numbers to the specified place:**

a- 14.3422 to the nearest tenths. = .....

b- 14.3422 to the nearest hundredths. = .....

c- 14.3422 to the nearest thousandths. = .....



## Exercises

**(1) Round the following numbers to the specified place:**

a- 14.353 to the nearest tenths. = .....

b- 20.3644 to the nearest tenths. = .....

c- 19.6654 to the nearest hundredths. = .....

d- 117.6644 to the nearest hundredths. = .....

e- 42.3784 to the nearest thousandths. = .....

f- 22.1919 to the nearest thousandths. = .....

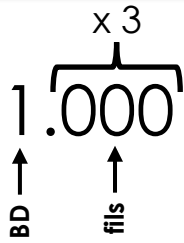
**(2) Round the following numbers to the specified place: (★★)**

a- 17.323881 to the nearest ten-Thousandths. = .....

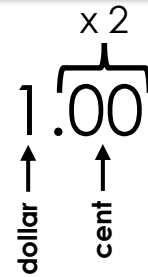
b- 17.323881 to the nearest hundred-thousandths. = .....

(D) Round the financial amounts: تقريب المبالغ المالية

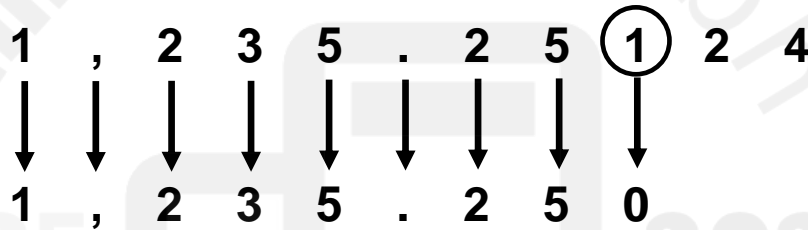
Bahraini Dinar (BD)



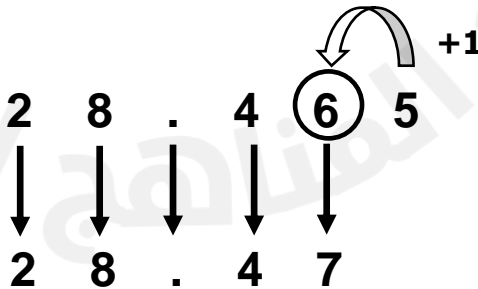
USA Dollar (\$)



► Round **BD 1,235.25124** to the nearest fils.



► Round **\$ 28.465** to the nearest cent.





## Examples

**(1) Round the following numbers to the specified place:**

a- BD 20.57451 to the nearest fils. = .....

b- BD 20.57451 to the nearest BD. = .....

c- \$ 14.3422 to the nearest cent. = .....

d- \$ 14.3422 to the nearest dollar. = .....



## Exercises

**(1) Round the following numbers to the specified place:**

a- BD 155.5744 to the nearest fils. = .....

b- BD 155.5744 to the nearest BD. = .....

c- BD 2,113,321.7347 to the nearest BD. = .....

d- BD 2,113,321.7347 to the nearest fils. = .....

**(2) Round the following numbers to the specified place:**

a- \$ 15.5432 to the nearest cent. = .....

b- \$ 15.5432 to the nearest dollar. = .....

c- \$ 678.6781 to the nearest cent. = .....

d- \$ 678.6781 to the nearest dollar. = .....

## 1.4 Money and the currency system نظام النقود والعملات

### ► Rate of Exchange معدل صرف العملات

Foreign Currency		Selling BHD	Buying BHD
 USA Dollar	USD	0.378000	0.375000
 Euro	EUR	0.474000	0.466600
 Japanese Yen	JPY	0.003632	0.363500
 Chinese Yuan Renminbi	CNY	0.058267	0.056451
 British Pound	GBP	0.524150	0.506650
 Indian Rupee	INR	0.005918	0.005168
 Thai Baht	THB	0.011938	0.108792
 Malaysian Ringgit RM	MYR	0.099942	0.084192
 Saudi Arabian Riyal	SAR	0.100650	0.100000
 Emirati Dirham	AED	0.103900	0.101400
 Kuwaiti Dinar KD	KWD	1.252950	1.238950
 Omani Rial	OMR	0.992490	0.968490
 Egyptian Pound	EGP	0.0240441	0.0220521
 Jordanian Dinar	JOD	0.531800	0.531800

(1) التحويل من العملة (البحرينية) إلى العملة (الأجنبية) نستخدم سعر البيع، لأن محل الصرافة سيبيعك العملة الأجنبية.

BHD → Foreign currency

BHD ÷ Selling price



### Example

(1) Use the above currency exchange table in the following currency conversion:

► You have BHD 1000 Bahraini Dinars and would like to convert it to USA Dollar.

$$= 1000 \div 0.378000 = \$ 2645.50$$

(2) التحويل من العملة (الأجنبية) إلى العملة (البحرينية) نستخدم سعر الشراء، لأن محل الصرافة سيشتري العملة الأجنبية.

Foreign currency → BHD

Foreign currency X Buying price



### Example

(1) Use the above currency exchange table in the following currency conversion:  
 ► After you return from travel, you have EGP 2500 Egyptian pounds and you want to get the Bahraini dinar.

$$= 2500 \times 0.0220521 = \text{BD } 55.130$$

(3) التحويل من العملة (الأجنبية) إلى العملة (الأجنبية): نستخدم أولاً سعر الشراء لتحويله للعملة البحرينية ثم نستخدم سعر البيع لتحويله إلى العملة الأجنبية مرة أخرى.

Foreign currency X Buying price = BHD

BHD ÷ Selling price = Foreign currency



### Example

(1) Use the above currency exchange table in the following currency conversion:  
 ► Mariam has GBP 1850 British Pound and she wants to convert it into Indian Rupees.

Step 1

$$= 1850 \times 0.506650 = \text{BHD } 937.303$$

Step 2

$$= 937.303 \div 0.005918 = \text{INR } 158381.72$$



## Exercises

**(1) Use the above currency exchange table in the following currency conversion:**

a- You have BHD 250 and would like to convert it to Euro.

.....  
.....

b- You have MYR 7,500 and you want to get the Bahraini dinar.

.....  
.....

c- Manal has KWD 950 and she wants to convert it into USA Dollar.

.....  
.....  
.....

**(2) Answer the following questions:**

a- Convert £1,000 to BHD if the rate of exchange is (£1= BD0.536).

.....  
.....

b- Convert BHD1,500 to EURO if the rate of exchange is (1 Euro= BD0.474).

.....  
.....

c- Change BHD1,250 to EP if the rates of exchange are (EP£ 1= BD0.080).

.....  
.....

**(3) Use the above currency exchange table in the following currency conversion:**

a- Bahraini family decided to travel to Kuwait. They need to change BHD 2,000 to KD. Find the amount they will get.

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.....  
.....

b- Sara Ali wants to send BHD 500 to her sister which she learns in London as draft. How many pounds sterling did she send to her sister?

.....  
.....  
.....

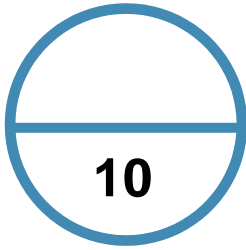
**(4) Answer the following case (★★)**

► Fahad converted BHD 5,000 into Emirati Dirham to buy a car from Dubai, but he didn't buy the car, and after returning to Bahrain, he converted the amount into Bahraini dinars.

**How much did Fahad lose?**

.....  
.....  
.....  
.....





**Q(1) Round the following numbers: (3 marks)**

- a- Round 4667 to the nearest hundred. ....
- b- Round 20.3208 to the nearest hundredths. ....
- c- BD 11,437.11034 to the nearest fils. ....

**Q(2) use the currency exchange table below to convert the following currencies: (4 marks)**

Foreign Currency		Selling BHD	Buying BHD
USA Dollar	USA	0.378000	0.375000
Euro	EUR	0.449100	0.446600
Saudi Arabian Riyal	SAR	0.100650	0.100000
Emirati Dirham	AED	0.103900	0.101400
Egyptian Pound	EGP	0.024041	0.022052
Jordanian Dinar	JOD	0.541800	0.531800

a- You have BHD 1000 Bahraini dinars and would like to convert it to EUR Euro.

.....

b- After you return from travel, you have USD 2500 USA dollar and you want to get the Bahraini dinar.

.....

**Q(3) Fatima has GBP 2500 and she wants to convert it into Saudi Arabian Riyal. How many SAR she receive, if the exchange rate as follow: (3 marks)**

(Sellin price of GBP=BHD 0.4636926) & (Buying price GBP=BHD0.4461437)

(Sellin price of SAR=BHD 0.1010560) & (Buying price SAR=BHD0.1000027)

.....

.....

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ملاحظة: هذه عينة من أسئلة الإمتحانات النهائية السابقة

# Unit (2)

## الوحدة الثانية

Salaries and Wages System

نظام الأجور والرواتب

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### Content:

- ▶ 2.2 Payroll by Hour & Week
- ▶ 2.3 Payroll by Piece & Rate
- ▶ 2.4 Payroll by commission & Bonus
- ▶ 2.5 Deductions

## Unit 2

### Salaries and Wages System

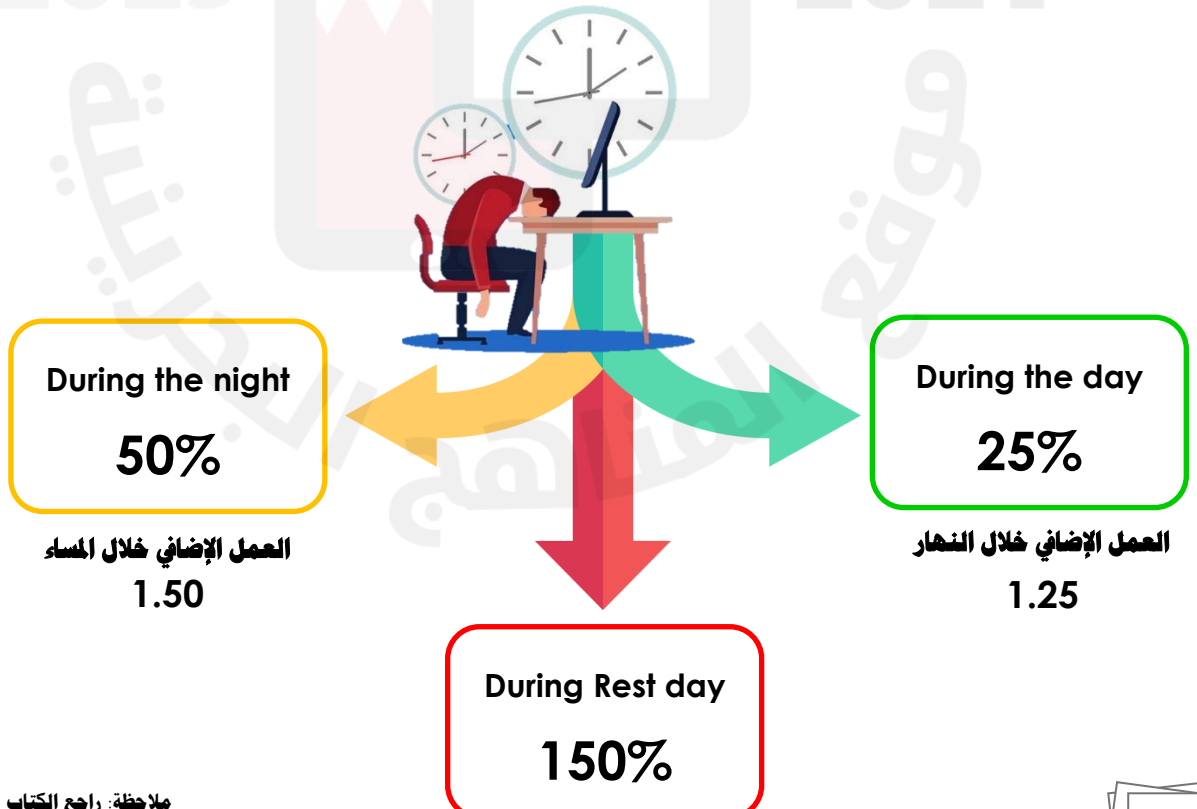
### نظام الأجور والرواتب

#### 2.2 Payroll by Hour & week الأجر حسب الساعة والأسبوع

#### (A) Regular working hours ساعات العمل الاعتيادية



#### (B) Additional working hours (Overtime) ساعات العمل الإضافية





### Example 1

► An employee is engaged for **46 hours** during the day a week at a basic rate of **BD2.500 per hour**. Calculate the **gross wage** received during the period.

Days	FRI	SAT	SUN	MON	TUE	WED	THU
Hours	0	8	8	6	8	8	8
O.T during the day	0	0	0	0	0	0	0
O.T During the night	0	0	0	0	0	0	0

**Note: (O.T) it means over time.**

**Solution:** Number of hours = .....

Total Regular wage = .....



### Exercises

**(1)** An employee is engaged for **48 hours** during the day a week at a basic rate of **BD3.000 per hour**. Calculate the **gross wage** received during the period.

Days	FRI	SAT	SUN	MON	TUE	WED	THU
Hours	0	8	8	8	8	8	8
O.T during the day	0	0	0	0	0	0	0
O.T During the night	0	0	0	0	0	0	0

**Note: (O.T) it means over time.**

**Solution:** .....

.....

**(2)** An employee is engaged for 47 hours during the day a week at a basic rate of BD3.500 per hour. Calculate the wage received during the period.

.....

.....

 **Example 2**

► Jameel worked the following hours during the week in **Jan 2021**:

Week	FRI	SAT	SUN	MON	TUE	WED	THU
1	1 JAN	2 JAN	3 JAN	4 JAN	5 JAN	6 JAN	7 JAN
	0	8	8	7	8	8	8
2	8 JAN	9 JAN	10 JAN	11 JAN	12 JAN	13 JAN	14 JAN
	0	8	8	8	8	8	5
3	15 JAN	16 JAN	17 JAN	18 JAN	19 JAN	20 JAN	21 JAN
	0	6	8	8	8	8	8
4	22 JAN	23 JAN	24 JAN	25 JAN	26 JAN	27 JAN	28 JAN
	0	8	8	8	8	8	8
5	29 JAN	30 JAN	31 JAN	1 FEB	2 FEB	3 FEB	4 FEB
	0	8	8	8	8	6	8

Calculate the wage for the month of **January 2021**, the average hourly wage is **BHD 2.800**.

**Solution:** **Number of hours** = Week 1= .....

..... Week 2= .....

..... Week 3= .....

..... Week 4= .....

..... Week 5= .....

**Total Working Hours** = .....

**Total Regular wage** = .....



## Exercise

► Yaser worked the following hours during the weeks in **Feb 2022**:

Week	FRI	SAT	SUN	MON	TUE	WED	THU
1	1 FEB	2 FEB	3 FEB	4 FEB	5 FEB	6 FEB	7 FEB
	0	8	8	8	8	8	6
2	8 FEB	9 FEB	10 FEB	11 FEB	12 FEB	13 FEB	14 FEB
	0	8	8	8	8	8	5
3	15 FEB	16 FEB	17 FEB	18 FEB	19 FEB	20 FEB	21 FEB
	0	8	8	8	8	8	6
4	22 FEB	23 FEB	24 FEB	25 FEB	26 FEB	27 FEB	28 FEB
	0	8	8	8	8	8	7
5	1 MAR	2 MAR	3 MAR	4 MAR	5 MAR	6 MAR	7 MAR
	0	8	8	8	8	6	8

Calculate the wage for the month of **February 2021**, the average hourly wage is **BHD 2.000**.

**Solution:** .....

2023

2024



### Example 3

► Ahmed worked the following hours **during the week** in:

Days	FRI	SAT	SUN	MON	TUE	WED	THU
Hours	8	8	8	6	8	8	8
O.T During the day	0	2	0	3	0	2	0
O.T During the night	0	0	1	0	2	3	0

Calculate the total wage during the week, if you know that the average **hourly wage is BHD 3.000**.

#### Solution:

Regular wage = .....

Wage of weekly rest day (Friday) = .....

Over Time of during the day = .....

Over Time of during the night = .....

**Total Wages** = .....



### Exercise

► Ali worked the following hours **during the week** in:

Days	FRI	SAT	SUN	MON	TUE	WED	THU
Hours	8	8	8	8	8	8	8
O.T During the day	0	0	3	0	0	0	3
O.T During the night	0	0	0	3	3	0	0

Calculate the total wage during the week, if you know that the average **hourly wage is BHD 4.000**.

#### Solution:

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### Example 4

► Faisal worked the following hours **during the week** in:

Days	FRI	SAT	SUN	MON	TUE	WED	THU
Hours	0	7	8	6	8	7	8
O.T During the day	0	0	0	2.5	0	3.5	1
O.T During the night	0	0	3	0	2	3	2

Calculate the total wage during the week, if you know that the average **hourly wage is BHD 3.750**.

#### Solution:

Regular wage = .....

Over Time of during the day = .....

Over Time of during the night = .....

**Total Wages =** .....



### Exercise

► Jamal worked the following hours **during the week** in:

Days	FRI	SAT	SUN	MON	TUE	WED	THU
Hours	0	8	8	8	8	8	8
O.T During the day	0	0	2	0	0	0	3
O.T During the night	0	0	0	3	2	0	0

Calculate the total wage during the week, if you know that the average **hourly wage is BHD 2.500**.

#### Solution:

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.....



(C) The month of **RAMADAN** working hours **ساعات العمل في شهر رمضان**

**Per Day**  
**6 hours**



**Per Week**  
**36 hours**

**Example 5**

► Mohammed worked the following hours during the month of **Ramadan** from **13 April 2021** to **12 May 2021**:

Week	FRI	SAT	SUN	MON	TUE	WED	THU
1	9 APR	10 APR	11 APR	12 APR	13 APR	14 APR	15 APR
	8	8	8	8	6	6	6
2	16 APR	17 APR	18 APR	19 APR	20 APR	21 APR	22 APR
	0	6	6	6	6	5	6
3	23 APR	24 APR	25 APR	26 APR	27 APR	28 APR	29 APR
	0	6	6	6	6	6	6
4	30 APR	1 MAY	2 MAY	3 MAY	4 MAY	5 MAY	6 MAY
	0	5	6	6	6	6	6
5	7 MAY	8 MAY	9 MAY	10 MAY	11 MAY	12 MAY	13 MAY
	0	6	6	6	6	4	0

Calculate the wage for the month of **Ramadan**, if you know that the average hourly wage is **BHD 4.200** .

**Solution:** **Number of hours** = Week 1= .....

..... Week 2= .....

..... Week 3= .....

..... Week 4= .....

..... Week 5= .....

**Total Working Hours** = .....

**Total Regular wage** = .....



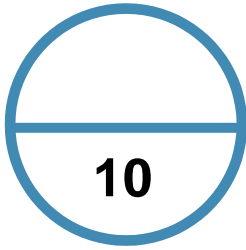
## Exercise

► Salman worked the following hours during the month of **Ramadan** from **12 Mar 2024** to **9 Apr 2024**:

Week	FRI	SAT	SUN	MON	TUE	WED	THU
1	8 MAR	9 MAR	10 MAR	11 MAR	12 MAR	13 MAR	14 MAR
	0	8	8	8	6	6	6
2	15 MAR	16 MAR	17 MAR	18 MAR	19 MAR	20 MAR	21 MAR
	0	6	6	6	6	6	6
3	22 MAR	23 MAR	24 MAR	25 MAR	26 MAR	27 MAR	28 MAR
	0	6	6	6	6	6	6
4	29 MAR	30 MAR	31 MAR	1 APR	2 APR	3 APR	4 APR
	0	0	0	0	6	6	6
5	5 APR	6 APR	7 APR	8 APR	9 APR	10 APR	11 APR
	0	6	6	6	6	0	0

Calculate the wage for the month of **Ramadan**, if you know that the average hourly wage is **BHD 4.000** .

**Solution:**



# EVALUATION

**Q (1)** Saleh worked the following hours during the week in the follow: **(5 Marks)**

Days	FRI	SAT	SUN	MON	TUE	WED	THU
Hours	0	8	8	8	8	8	8
O.T During the day	0	0	1	0	0	1	1
O.T During the night	0	2	0	2	2	0	0

Calculate the total wage during the week, if you know that the average hourly wage is BHD 4.500.

**Solution:**

.....

.....

.....

.....

.....

**Q (2)** An employee is engaged for 48 hours during the week at a basic rate or BD4.000 per hour. Calculate the gross wage received during the period. **(5 Marks)**

Days	SAT	SUN	MON	TUE	WED	THU
Hours	8	8	8	8	8	8
O.T During the day	4	0	3	0	2	0

**Solution:**

.....

.....

.....

.....

.....

ملاحظة: هذه عينة من أسئلة الإمتحانات النهائية السابقة

## 2.3 Payroll by Piece & Rate System الأجر حسب القطعة والنسبة



### Examples 1

► Khalid an employee at Gulf Plastic co. is given **BHD 0.750** as **piece rate** of work. Find his total pay for a September 2021, if his total production for that month was **360 pieces**.

**Solution:** **Total wage pay** = Number produced **X** Rate per piece  
= 360 **X** BHD 0.750  
= **BHD 270.000**

### Exercises

(1) Fatima an employee at Manama co. is given BHD 0.750 as piece of work. If she produced 300 piece. How much she received?

.....  
.....

(2) Find the total pay for Sep 2021 for one worker, if his total production was 320 pieces and BHD 0.800 a piece rate.

.....  
.....

(3) Ebrahim is an employee of the ABC co. he is entitled to a monthly salary of BHD 400 addition to BHD 0.250 each piece produced per month. If he produced 450 pieces in this month, how much his total monthly salary?

.....  
.....  
.....

**(4)** Hasan is an employee of the Al-Noaim co. he is entitled to a monthly salary of BHD 500 addition to BHD 0.400 each piece produced per month. If he produced 1000 pieces in this month, how much his total monthly salary?

.....

.....

.....



### Examples 2

► Fill in the missing value in the following table:

No.	Employee	No-produced	Rate per piece	Total pay
1	Sami	900	$??? = \frac{405}{900} = 0.450$	BHD 405.000
2	Ahmed	$??? = \frac{382.5}{0.850} = 450$	0.850	BHD 382.500
3	Zaid	600	1.450	??? = 600 X 1.450 = 870



### Exercises

► Fill in the missing value in the following table: **(Show your calculation)**

No.	Employee	No-produced	Rate per piece	Total pay
1	Ali	1000	.....	BHD 500.000
2	Hasan	600	1.200	.....
3	Salman	.....	0.450	BHD 450.000
4	Fatima	600	0.350	.....



### Examples 3

► Mona an employee at Al-Jazeera company, **earned BHD 306** in one month. If she **produced 360 pieces** in this month, **what is the rate for each piece of work she's given?**

**Solution:** Rate of each piece =  $\frac{\text{Earned BHD}}{\text{Produced pieces}}$

$$= \frac{\text{BHD } 306}{360}$$
$$= \text{BHD } 0.850$$



### Exercises

**(1)** Ahmed an employee at Al-Hadi company, earned BHD 400 in one month. If she produced 1000 pieces in this month, what is the rate for each piece of work she's given?

.....

.....

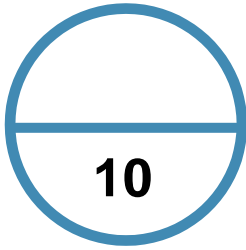
.....

**(2)** Zain an employee at Al-Manar, earned BHD 350 in one month. If she produced 700 pieces in this month, what is the rate for each piece of work she's given?

.....

.....

.....



**Q (1)** Fill in the missing value in the following table: **(3 Marks)**

No.	Employee	No-produced	Rate per piece	Total pay
1	Sami	500	.....	BD 1200
2	Ahmed	.....	BD 0.650	BD 650
3	Zaid	1500	BD 1.250	.....

**Q (2)** Hanan an employee at Muharq co. is given BHD 0.750 as piece of work. If she produced 300 piece. How much she received? **(2 Marks)**

.....  
.....

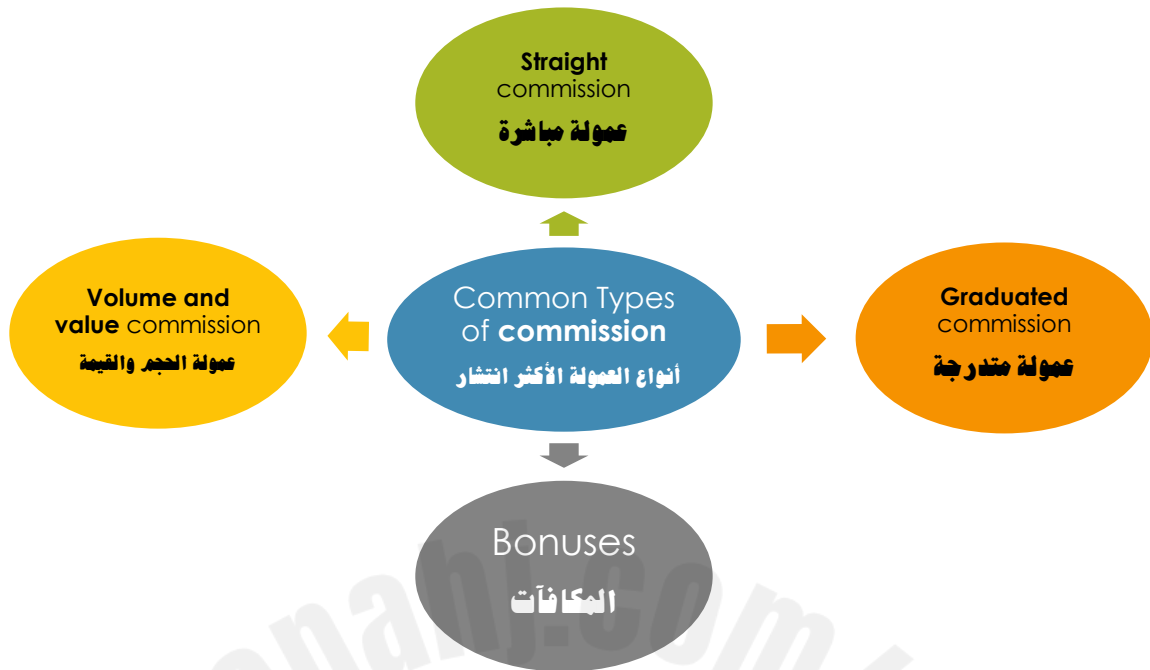
**Q (3)** Mahmood is an employee of the JAC co. he is entitled to a monthly salary of BHD 600 addition to BHD 0.250 each piece produced per month. If he produced 450 pieces in this month, how much his total monthly salary? **(2 Marks)**

.....  
.....  
.....

**Q (4)** Ahmed an employee at Al-Manahel co. earned BHD 600 in one month. If she produced 1200 pieces in this month, what is the rate for each piece of work she's given? **(3 Marks)**

.....  
.....  
.....

## 2.4 Payroll by commission & Bonuses الأجر حسب العمولة والمكافأة



### Example 1

► Nasser works as a salesman in a company for a **base salary of BHD300** per month plus a **commission of 5%** of sales. If she has made **sales of BHD2000** at the end of the Mar 2021. **What is the gross salary for this employee for the Mar 2021?**

**Solution:** Commission = Rate% X Sales  
= .....

**Total gross wage** = Basic salary + Commission  
= .....

### Exercise 1

► Salman should be refined a basic salary of BHD250 and a commission of 5% of goods sold, if the total sales for BHD722. What was his total income this month?

.....  
.....  
.....





## Example 2

► Ahmed an employee, is paid a **basic salary of BHD 300** per month, followed by **graduated commission of 2 ½%** on the first **BHD 1,000 of sales** and **5% thereafter**. **What will he earn when sales total BHD4700?**

**Solution:** **Commission on the first** = BHD 1,000 X Rate%

= .....

**Balance** = Total sales - **First** BHD1,000

= .....

**Commission on thereafter** = Balance X Rate%

= .....

**Total gross wage** = Basic salary + Commission 1 + 2

= .....



## Exercises

**(1)** Layla work with basic salary monthly BHD 500 and commission takes 2% of the first BHD20,000 of sales arranged and 1% thereafter. If she sells BHD175,580 of goods in total, what is the gross salary for this month?

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.....

.....

**(2)** Waleed works as salesman with 5% of sales and it increases to 7% if he sells more than BHD25,000. What is his total commission if the sales BHD48,000?

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.....



### Example 3

► Rashid work as a sales employee with a **monthly salary of BHD300** per month in addition **bonus** to **5%** of annual sales, which are over **BHD30,000**. If its annual sales reach **BHD45,000**, find his annual salary?

**Solution:** **Annual bonus** = Rate% X (Sales – Sales target)  
 = .....  
**Annual salary** = monthly salary X 12  
 = .....  
**Total annual salary** = Annual bonus + Annual salary  
 = .....



### Exercise 3

► Hassan work as a salesman with a **monthly salary of BHD400** in addition **bonus** to **6%** of annual sales, which are over **BHD10,000**. If its annual sales reach **BHD15,000**, find his annual salary?

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.....



### Example 4

► Find the missing value in the following table

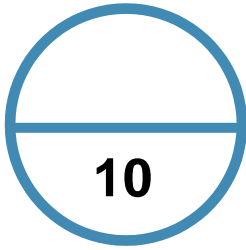
No	Employee	Salary BHD	Total Sales BHD	Commission		Total salary
				Rate	BHD	
1	Khalid	400	3000	5%	.....	BHD .....
2	Jamal	350	.....	2%	100	BHD .....
3	Manal	300	4000	.....	160	BHD .....



### Exercise 4

► Find the missing value in the following table

No	Employee	Salary BHD	Total Sales BHD	Commission		Total salary
				Rate	BHD	
1	Ahmed	500	5000	3%	.....	BHD .....
2	Fatima	700	.....	3%	90	BHD .....
3	Ali	450	2000	.....	50	BHD .....



## EVALUATION

**Q (1)** Ali works as a salesman in a company for a basic salary of BHD 500 per month plus a commission 5% of sales. If he has made sales of BHD 6000, what is the gross salary for this month? **(2 Marks)**

.....  
.....  
.....

**Q (2)** A salesperson is paid a graduated commission of 2% on the first BHD 2000 of sales and 3% thereafter. If the salesperson sells BHD 4000 worth of merchandise in a month, what is their commission for the month? **(3 Marks)**

.....  
.....  
.....

**Q (3)** A salesman is receiving a bonus of 10% of their annual sales if he exceed the sales target of BHD 50000. If the salesman sells BHD 60000 worth of merchandise in a year, what is his bonus amount in the end of year? **(2 Marks)**

.....  
.....  
.....

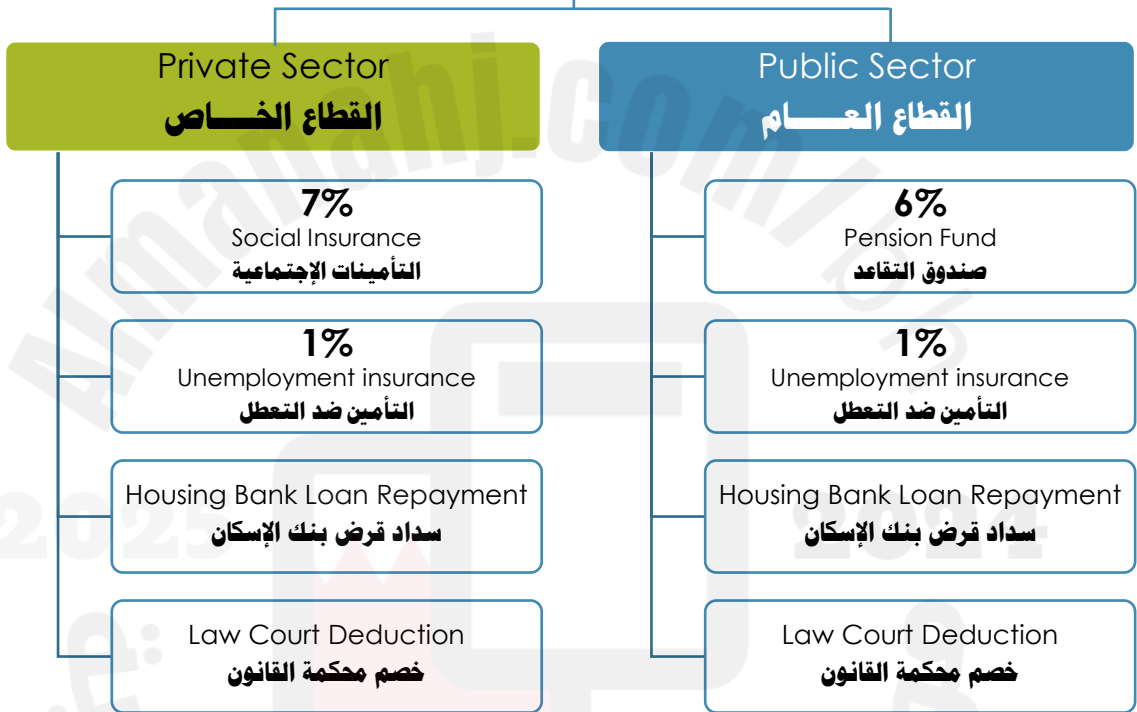
**Q (4)** Find the missing value in the following table **(3 Marks)**

No	Employee	Salary BHD	Total Sales BHD	Commission		Total salary
				Rate	BHD	
1	Salma	350	3000	3%	.....	BHD .....
2	Ahmed	500	.....	3%	120	BHD .....
3	Eman	400	6000	.....	60	BHD .....

## 2.5 Deductions الاستقطاعات



### Deductios



**Net salary** = ( Basic Salary + Total allowances ) – Total Deduction

**صافي الراتب** = ( إجمالي العلاوات + الراتب الأساسي ) – إجمالي الخصومات



## Example 1

► Mohammed works in private sector in the Bahrain Co., with a **basic monthly salary of BHD400** and **BD30 as a monthly qualification allowance**. And **BHD20 as phone allowances** this month only. Deducted per month **BHD50 law court**. Calculate his net salary for the month?

### Solution:

**Step (1) Total allowances** = qualification allowance + phone allowances  
= .....

### **Step (2) Total deduction**

a- **Social Insurance** = ( basic salary + qualification allowance ) X 7%  
= .....

b- **Unemployment Insurance** = ( basic salary + social allowance ) X 1%  
= .....

**Total allowances** = Social insurance + Unemployment insurance + Law court Deduction  
= .....

**Step (3) Net salary** = basic salary + Total allowances – Total deductions  
= .....



## Exercises

**(1)** Majed works in the Moon Co. He receives monthly a basic salary BHD 525, BHD 40 phone allowances and deducted per month BHD 120 law court. What is his net salary?

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**(2)** Taha worked on the hourly system in the kingdom Co. for BHD3.000 per hour BHD30 social allowance monthly and deducted BHD90 for the housing bank loan. If the working hours during the month of September 2022 are as follows:

- 46 hours of normal work.
- 10 hours of work during the day.
- 6 hours of work a night.
- 6 hours of work on Friday.

Calculate the net wage of September 2022.

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## Example 1

► Ahmed Ali works in the **Ministry of Education** earning **BHD1277 as basic salary**, **BHD70 as social allowance**, **BHD20 as transport allowance** and **BHD50 as living standard improving allowance**. Calculate his net salary for May 2021, if the housing bank loan is **BHD 171**.

### Solution:

$$\text{Step (1) Total allowances} = \begin{array}{l} \text{Social} \\ \text{allowance} \end{array} + \begin{array}{l} \text{Transport} \\ \text{allowance} \end{array} + \begin{array}{l} \text{Living standard} \\ \text{improving} \end{array}$$

$$= \dots\dots\dots$$

### Step (2) Total deduction

a- **Pension Fund Contribution** = ( basic salary + social allowance ) X **6%**

$$= \dots\dots\dots$$

b- **Unemployment Insurance** = ( basic salary + social allowance ) X **1%**

$$= \dots\dots\dots$$

$$\text{Total allowances} = \begin{array}{l} \text{Pension Fund} \\ \text{Contribution} \end{array} + \begin{array}{l} \text{Unemployment} \\ \text{insurance} \end{array} + \begin{array}{l} \text{Housing} \\ \text{bank loan} \end{array}$$

$$= \dots\dots\dots$$

**Step (3) Net salary** = basic salary + Total allowances – Total deductions

$$= \dots\dots\dots$$





## Exercises

(1) Khalid Salem is an assistant manager at one of the government ministries. Calculate his net monthly salary if you know that he is due for the following month:

- Basic salary BHD 1250
- Social allowance BHD 70
- Living standard improving allowance BHD 50
- Travel allowance BHD 120

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(2) Complete the following payroll blanks with the solution steps:

PERSONEL INFORMATION	
Ministry	Ministry of Health
CPR	XXXXXXXXXX
Name	Yasser Salman Juma
Position Title	X-ray specialist
Month	Sep- 2021
Grade-Step	B8- 5
Bank-name	National Bank of Bahrain
Acc.No.	002969721563400

PAYMENT INFORMATION	
Basic Salary	850.000

ALLOWANCES	
Social Allowance	50.000
Living Standard Improving Allowance	50.000

GROSS PAY	
	???

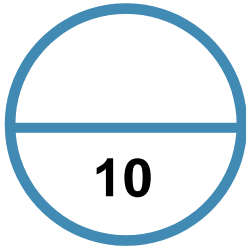
DEDUCTIONS	
Social Pension Deduction	???
Unemployment Insurance Deduction	???
Pension Fund Contribution Deduction	???

GROSS DEDUCTION	
	???

NET PAY	
	???



**Q (1)** Salem works in a private sector of Alamal co. in Bahrain with a basic monthly salary of the BHD 750 and BHD 100 as a monthly transportation allowance. If you know 7% as social insurance and 1% unemployment insurance deduction.

**Calculate his net salary for the month? (5 Marks)**

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**Q (2)** Complete the following payroll blanks with the solution steps: **(5 Marks)**

PERSONEL INFORMATION	
Ministry	Ministry of Health
CPR	XXXXXXXXXX
Name	Yasser Salman Juma
Position Title	X-ray specialist
Month	Sep- 2021
Grade-Step	B8- 5
Bank-name	National Bank of Bahrain
Acc.No.	002969721563400

PAYMENT INFORMATION	
Basic Salary	650.000

ALLOWANCES	
Social Allowance	70.000
Living Standard Improving Allowance	50.000

GROSS PAY	
	???

DEDUCTIONS	
Social Pension Deduction	???
Unemployment Insurance Deduction	???
Pension Fund Contribution Deduction	???

GROSS DEDUCTION	
	???

NET PAY	
	???

# Unit (3)

## الوحدة الثالثة

Discounts and Pricing Goods

التخفيضات وتسعير البضائع

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### Content:

- ▶ 3.1 Trade Discount
- ▶ 3.2 Cash Discount
- ▶ 3.3 Value Added Tax (VAT)
- ▶ 3.4 Tariff in the Kingdom of Bahrain
- ▶ 3.5 Pricing goods Based on cost price
- ▶ 3.6 Pricing goods Based on selling price
- ▶ 3.7 Mark-Down

# Unit 3

## Discounts and Pricing Goods

### التخفيضات وتسعير البضائع



Important Points نقاط مهمة

► Trade Discount الخصم التجاري

$$\text{Trade Discount} = \text{List Price} \times \text{Discount Rate}$$

► Net Price السعر الصافي (بعد الخصم)

$$\text{Net Price} = \text{List Price} - \text{Trade Discount}$$

► Discount Rate معدل الخصم

$$\text{Discount Rate} = \frac{\text{Trade Discount}}{\text{List Price}} \times 100$$

► List Price قائمة الأسعار (السعر الأصلي)

$$\text{List Price} = \frac{\text{Net Price}}{\text{Complement of Trade Discount Rate}}$$



### Example 1

► The list price of a **laptop** is **BHD520**. ABC computer co. gives a **30% discount** to all retailers. What is the amount of **trade discount** and payment (**net price**)?

**Solution:** .....  
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### Exercises

**(1)** The list price of a motor bike is BHD3000. A manufacturer gives a 20% discount to all retailers. What is the trade discount and price (Payment)?

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**(2)** The list price of a computer is BHD1000, and a manufacturer gives a 15% discount to all retailers. What is the trade discount and net price (payment)?

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**(3)** The list price of a sewing machine is BHD122.990. A manufacturer gives a 30% discount to all retailers. What is the trade discount?

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**(4)** The list price of a window type air-conditioner is BHD180, the net price is BHD151. What is the trade discount?

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## Example 2

► Retailer's net price is **BHD 160** for Air-conditioning with a **list price** of **BHD 200**. What is the **discount rate**?

**Solution:**

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## Exercises


**(1)** The list price of a washing machine is BHD275, The net price BHD225. What is the discount rate?



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**(2)** A manufacturer's net price is BHD58.950 for a fan with a list price of BHD72.990. What is the discount rate to the nearest percentage?

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**(3)** Complete the invoice if you know the following: A publisher's net price is BD13.200 for a book with a list price of BHD16.500.



 Telephone: 179898xx  
 Fax: 179898xx – PO Box 15xx  
 Manama – Kingdom of Bahrain

**INVOICE**

Date: 15 Oct 2021                      Invoice No.: A1547

To: Ahmed Fahad Abdulla

S. No. Items	Items Details	Quantity	Unit Price		Total Price	
			BHD	Fils	BHD	Fils
1	Books	10	1	650		
Signature 			Total Price			
			Discount .....			
			Net Price			



### Example 3

► The Bahrain Company promoted the price of a baby milk carton at **BHD10.000** with **trade discount based on the following buyer's order volume or quantities:**

Trade Discount	Quantity
0%	1-10
5%	11-50
10%	51-100
20%	Over 100

**If a customer buys 70 boxes, how much will he pay to Bahrain Co.?**

**Solution:** Trade Discount = 10 X 10 X 0% = BHD 0.000  
= 40 X 10 X 5% = BHD 20.000  
= 20 X 10 X 10% = BHD 20.000

**Total trade discount = BHD 40.000**

Net Price = (70 X 10) - 40 = BHD 660.000



### Exercise 3

**(1)** The ABC Company promoted the price of a Juice carton at BHD4.000 with trade discount based on the following buyer's order volume or quantities:

Trade Discount	Quantity
0%	1-10
5%	11-50
10%	51-100
20%	Over 100

If a customer buys 100 boxes, how much will he pay to ABC Company?

**Solution:** .....

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### Example 4

► IKEA gave a discount card (IKEA Family Members) to the customer at a **rate 10%**. If the **customer paid BHD225**. What is the **list price** of the item?

**Solution:** List price = 
$$\frac{\text{Net Price}}{\text{Complement of Trade Discount Rate}}$$
$$= \frac{225}{(100\% - 10\%)} = \text{BHD250}$$



### Exercises

(1) One customer paid a net price of BHD45 to the supermarket with a discount rate 4%. What is the list price of the bill?

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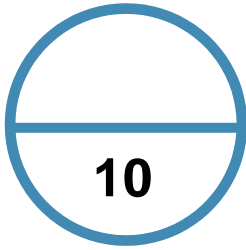
(2) Salman gets a special discount of 50% and he paid BHD300. How much was the original price of the items?

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**Q (1)** A manufacturer gives 25% discount to the first hundred refrigerators and 30% over hundred to all retailers. If the price of each one is BHD200. Calculate the trade discount and net price for the following: **(5 Marks)**

- a- Al Dana Electronics bought 80 refrigerators.
- b- Carrefour stores bought 150 refrigerators.

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**Q (2)** Manama Co. promoted the price of oil carton at BHD12.000 with trade discount 10% to 100 cartons and 12% for more than 100 cartons. Find the net price if the customer bought 170 cartons. **(3 Marks)**

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**Q (3)** Al Jazeera supermarket customers enjoy collecting points of sale to obtain a commercial discount at a rate of 5% for every thousand points. If a customer purchases BHD 165.425 and has 1000 points, how much will he pay to cashier? **(2 Marks)**

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## 3.2 Cash Discount الخصم التجاري

### Meaning of some trade Terms that might appear on the invoices

Terms	Meaning
3/10	3% discount if payment made within <b>10 days</b> of invoice date.
1/30	1% discount if payment made within <b>30 days</b> of invoice date.
2/10, E.O.M	2% discount within <b>10 days</b> of beginning of next month (E.O.M. means End Of Month).
n/30	<b>No Discount</b> / Net within <b>30 days</b> of invoice date.
3/10, n/30, R.O.G	3% within <b>10 days</b> of <b>Receipt Of Goods (R.O.G.)</b> , net from <b>11<sup>th</sup> to 30<sup>th</sup></b> days.

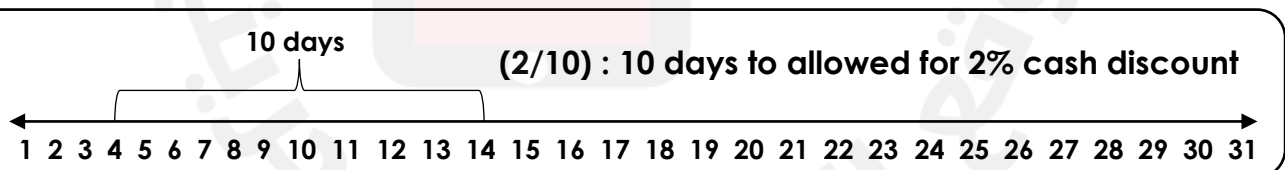


#### Example 1

► Adam received an invoice dated **4<sup>th</sup> July 2022** from phone store. That shows a **net price of BHD 450** with the **terms 2/10, n/30**.

- Find the latest date the cash discount is allowed.
- How much will he pay on **12 July 2022**?
- How much will he pay assuming on **16 July 2022**?

**Solution:** a- The cash discount is **allowed up to 14<sup>th</sup> July 2022** and including 10 days from the invoice date 4<sup>th</sup> July 2022.



**b- On 12 July 2022:** Cash Discount = Net Price X Cash Discount Rate  

$$= 450 \times 2\% = \text{BHD } 9$$
 Net amount = Net Price - Cash Discount  

$$= 450 - 9 = \text{BHD } 441$$

**c- on 16 July 2022** = BHD 450 (pay the **Net Price** without cash discount)



## Exercises

(1) Salman purchased some goods on September 10, 2022 for BD5000. The invoice shows the term 5/15 n/60. Calculate the payment amount if he paid on September 21, 2022?

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(2) Ahmed purchased TV on December 25, 2022 for BD400. The invoice shows the term 2/10, n/30. Calculate the payment amount if he paid on January 1, 2023?

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## Example 2

► Hassan purchased Car on **September 2, 2022** for **BD7000**. The invoice shows the term 10/15, n/90 E.O.M. Calculate the payment amount if he **paid on October 7, 2022?**

**Solution:**

**E.O.M.** = **End Of Month** = 15 days of next month = 15<sup>th</sup> October 2022.

**Cash Discount** = 7000 X 10% = BHD 700

**Net Payment** = 7000 - 700 = BHD 6300

2024



## Exercises

(1) Mohammed purchased some goods on January 2, 2023 for BD2000. The invoice shows the term 1/10 n/30 E.O.M. Calculate the payment amount if he paid on February 12, 2023?

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(2) Mohammed purchased some goods on January 2, 2023 for BD2000. The invoice shows the term 1/10 n/30 E.O.M. Calculate the payment amount if he paid on February 3, 2023?

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### Example 3

► Find the amount paid for the following invoice if it received on **January 24,2022** and paid it on **February 2,2022**.

Balance	987	000
Freight	36	000
<b>Total BHD</b>	<b>1,023</b>	<b>000</b>
<b>Date:</b>	05-01-2022	
<b>Terms:</b>	3/10, 1/30, n/60	

- **Freight = توصيل** (قيمة التوصيل غير مشمولة في عملية الخصم)
- يوجد خصمين متاحين والمتحقق هو الأول **3%** حيث أنه يقع ضمن فترة السماح **10 أيام**.
- **Cash Discount =  $987.000 \times 3\% = \text{BHD}29.610$**
- **Net Price =  $1023.000 - 29.610 = \text{BHD}993.390$**



### Exercises

(1) Find the amount paid for the following invoice if it received on **January 24,2022** and paid it on **February 10,2022**.

Balance	987	000
Freight	36	000
<b>Total BHD</b>	<b>1,023</b>	<b>000</b>
<b>Date:</b>	05-01-2022	
<b>Terms:</b>	3/10, 1/30, n/60	

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(2) Find the amount paid for the following invoice if it received on **September 5,2022** and paid it on **October 7,2022**.

Balance	5,682	000
Freight	318	000
<b>Total BHD</b>	<b>6,000</b>	<b>000</b>
<b>Date:</b>	02-09-2022	
<b>Terms:</b>	3/10, E. O. M.	

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**(3)** Find the amount paid for the following invoice if it received on **May 8,2022** and paid it on **May 16,2022**.

Subtotal	2,587	970
Less 7% and 10%		
Balance		
Freight	341	860
<b>Total BHD</b>		
<b>Date:</b> 04-05-2022		
<b>Terms:</b> 4/10, n/30, R.O.G.		

**(4)** Find the amount paid for the following invoice if it received on **June 7,2022** and paid it on **July 1,2022**.

Subtotal	3,119	990
Less 7% and 10%		
Balance		
Freight	45	650
<b>Total BHD</b>		
<b>Date:</b> 07-06-2022		
<b>Terms:</b> 8/10, n/30, R.O.G.		



## Example 4

- The goods listed on the ABB Tools Store invoice shown were received on **26<sup>th</sup> March 2022** and the bill was paid **2<sup>nd</sup> April 2022**. How much was the amount paid?





ABB TOOLS STORE  
Tel: 173311xx – PO Box 874x  
Isa Town – Kingdom of Bahrain





No. M44452

Date: 26-03-2022

Terms: 4/10, n/30, R.O.G.


### INVOICE

Name: Ali Ahmed Maher [https://www.instagram.com/xxxxx\\_bh](https://www.instagram.com/xxxxx_bh)

S. No. Items	Items Details	Quantity	Unit Price		Total Price	
			BHD	Fils	BHD	Fils
1	Leverage Cutters	40	18	950	758	000
2	Expansive Bit	50	6	950	347	500
<b>Subtotal</b>					<b>1,105</b>	<b>500</b>
<b>Less Trade Discount</b>					<b>409</b>	<b>040</b>
<b>Balance</b>					<b>696</b>	<b>460</b>
<b>Freight</b>					<b>29</b>	<b>850</b>
<b>Total BD</b>					<b>726</b>	<b>310</b>

CASH	US\$	OTHERS	AMEX	VISA	MASTER	DINARS

Signature: 

### Solution:

The **4%** discount **applied** since payment was made **within 10 days** of receipt of goods.

$$\text{Cash Discount} = (\text{Net price} - \text{Freight}) \times \text{Cash Discount}$$

$$= (726.310 - 29.850) \times 4\% = \text{BHD } 27.860$$

$$\text{Total Paid} = \text{Net Price} - \text{Cash Discount}$$

$$= 726.310 - 27.860 = \text{BHD } 698.450$$



## Exercise 4

► Adam received an invoice dated **14<sup>th</sup> July 2023** from the Magic Phone store. that shows a **net price of BHD 4663.550** with the **terms 2/10, n/30**. How much was the amount paid?

MAGIC Phone Store			Invoice			
Term 2/10 n/30		Date 14-7-2023		Invoice No.: 00541	To: Adam Eid Jassim	
No of Items	Item Details	Quantity	Unit Price		Total price	
			BHD	Fils	BHD	Fils
1	Phone 13	10	400	500		
Total Price						
Discount 10%						
Net Price						

a) What is the last date the cash discount is applicable?

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b) How much will he pay on 20 July 2023?

**Cash Discount** = Net Price X Cash Discount

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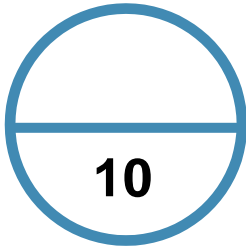
**Net amount** = Net Price – Cash Discount

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c) How much will he pay assuming on 26 July 2023?

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**EVALUATION**

**Q (1)** Hassan received an invoice dated 4th March 2022 from Home store. That shows a net price of BHD 650 with the terms 2/10, n/30.

- a- Find the latest date the cash discount is allowed. **(2 Marks)**
- b- How much will he pay on 12 March 2022? **(4 Marks)**
- c- How much will he pay assuming on 20 March 2022? **(4 Marks)**

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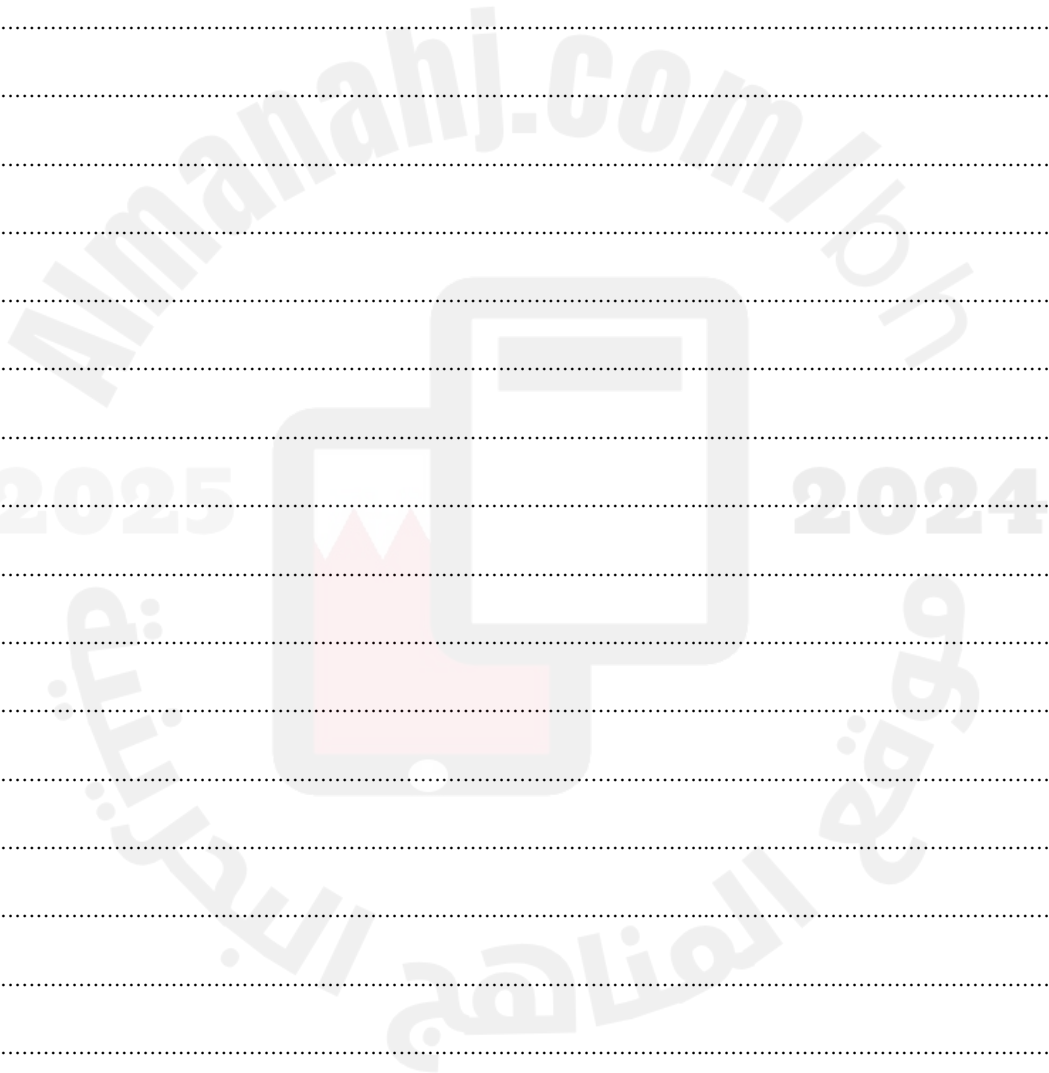
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### 3.3 Value Added Tax (VAT) ضريبة القيمة المضافة



0%

10%

Item	Zero-rated (0%)	Standard rated (10%)
الأطعمة Food	Food items listed in the GCC	Restaurants and coffee shops
التعليم Education	Educational services provided by kindergartens	Professional education
الصحة Healthcare	General medical health services	Cosmetic procedure
الخدمات المالية Financial Services	Interest payments on loans	General insurance, Fees paid on remittances
الوقود والغاز Oil and Gas	Oil and Gas	
مقاولات بناء م.ج Construction of new buildings	Construction services	Construction works to an existing building
العقارات Real Estate	Exempt	Hotel accommodation, Rental of function room and halls
المواصلات Transportation Services	Local transport of goods and passengers	Vehicle purchases, Vehicle rental without a driver
الإتصالات Telecommunication Services		Fixed phone services (i.e. landlines) -Home internet
الإستيراد والتصدير Import and Export	Export of services	Services provided in Kingdom of Bahrain by a foreign company.



## Example 1

► Fahad bought the following from the supermarket. **Calculate the value added tax** and **Excise Goods** for the following purchases:



Milk 1 liter

BHD 0.450



TV 21" inch

BHD 50.000



Energy Drinks

BHD 1.250

### Solution:

- VAT Milk 1 liter =  $0.450 \times 0\%$  = BHD 0.000
- VAT TV 21" inch =  $50.000 \times 10\%$  = BHD 5.000
- Excise Goods (Energy Drinks) =  $1.250 \times 100\%$  = BHD 1.250

**Total VAT and Excise Goods =  $0.000 + 5.000 + 1.250 = \text{BHD } 6.250$**

**Total Pay =  $(0.450 + 50.000 + 1.250) + 6.250 = \text{BHD } 57.950$**



**(2) Find value added tax for the following:**

- BHD 6.500 Gasoline for vehicles.
- BHD 12.850 School uniforms.
- BHD 8000 A new extension to an existing building.
- BHD 188 Mobile phone services.
- BHD 161.250 Interest payment on loans.

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**(3)** Jassim bought a new car model 2021 for BHD5300 with trade discount 10% also, paid the annual insurance premium BHD220. Find the following:

**a- Total VAT.**

**b- Total Payment.**

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**(4)** A man bought BHD 15.600 of cigarettes – find the VAT and total payment.

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**(5) Find the unknown factors in the following table:**



Item	List Price	Trade Discount	Net Price	VAT	Amount Payment
Home Internet	BHD18.000	..... %	BHD14.400	BHD .....	BHD .....
Motor Oil	BHD .....	10%	BHD .....	BHD .....	BHD18.000
Fees of Cheque Books	BHD10.000	NO DISC.	BHD .....	BHD .....	BHD .....
Car spare Parts	BHD .....	5%	BHD .....	BHD .....	BHD199.500

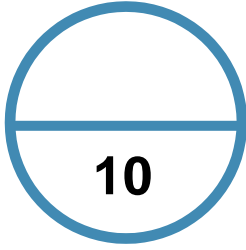
### 3.4 Tariff in the Kingdom of Bahrain **التعرفة الجمركية في مملكة البحرين**

Duty %	Example of common goods
<b>Free Duty Exempt</b>	Fresh vegetable and fruits, fresh or frozen fish, dairy, meat, all other alive animals that are used for human consumption, books, magazines, catalogues, and all other printed papers for advertising. Includes <u>428</u> listed commodities, mostly food and medical products
<b>البضاعة المعفية من الرسوم</b>	<b>الخصروات والفواكه الطازجة، الأسماك الطازجة والمثلجة، الألبان، اللحوم، وجميع الحيوانات الحية الصالحة للاستهلاك البشري، الكتب، المجلات، الكاتلوجات، وكل المطبوعات الدعائية. تحتوي القائمة على 428 صنف أغلبها أطعمة ومنتجات طبية</b>
<b>10%</b>	All imported items like clothes, perfumes, cars, electronics like television, videos, and calculator.
<b>10%</b>	<b>كل البضائع المستوردة ك: الملابس، العطور، السيارات، والإلكترونيات ك: أجهزة التلفاز، وأجهزة الفيديو، والآلات الحاسبة.</b>
<b>100%</b>	Tobacco and Tobacco related products.
<b>100%</b>	<b>التبغ وجميع المنتجات المتعلقة به.</b>
<b>125%</b>	Alcoholic beverages.
<b>125%</b>	<b>المشروبات الكحولية.</b>



(2) Complete the following invoice:

	<h1>Gulf Co</h1> <p>NO: 04511</p>		
TRN:220045212133401	<h2>Vat Invoice</h2>		
 gulfbah21@hotmail.com	  gulfbah21		
Name: ...Osawa Ahmed..... CPR:8500216412 Te:...3924510**			
Date: ...12.Sep.2021...			
Qty	Item	Unit Price	Total
1	Mobile Phone	200.000	.....
2	Wireless Headphones	50.000	.....
Total BHD			.....
Trade Discount 10%			.....
Net Price			.....
Vat 10%			.....
Payment amount			=====



EVALUATION

**Q (1)** Salman bought furniture for his house BHD8000 with trade discount 20%. Also, paid transportation BHD150. Find the following: **(4 Marks)**

1- Total VAT.

2- Total Payment.

**Q (2)** Complete the following invoice, showing the steps of the solution below: **(6 Marks)**

Qty	Item	Unit Price (BHD)	Total (BHD)
1	Photo-copier	1500.000	1500
1	Office table	300.000	.....
Subtotal			(a) .....
Trade Discount 5%			(b).....
Net Price			(c).....
Vat 10%			(d).....
Payment amount			(e).....



### 3.5 Pricing Goods Based on Cost Price تسعير البضاعة بناءً على التكلفة

Mark-up

هامش الربح

Important Points نقاط مهمة

- ▶ Amount of Mark-up مبلغ هامش الربح

$$\text{Amount of Mark-up based on cost} = \text{Selling Price} - \text{Cost}$$

- ▶ Percentage of Mark-up نسبة هامش الربح

$$\text{Percentage of Mark-up} = \frac{\text{Selling Price} - \text{Cost}}{\text{Cost}} \times 100$$

#### Example 1

- ▶ A retailer's **cost** for a digital camera was **BHD210.500**. The camera was **sold** for **BHD250.500**. what was the **Mark-up** amount and percentage **based on cost**?

**Solution:** Mark-up amount = Selling price – Cost  
= 250.500 – 210.500 = BHD 40

Mark-up percentage =  $\frac{\text{Selling price} - \text{Cost}}{\text{Cost}} \times 100$   
=  $\frac{250.500 - 210.500}{210.500} \times 100 = 19\%$



## Exercises

(1) A retailer's cost for an electric oven is BHD229.000. The oven sold for BHD168.880. what was the Mark-up amount and Mark-up percentage based on cost?

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(2) A retailer sells a washing machine that costs BHD140.980 for BHD201.950. What is the Mark-up amount and Mark-up percentage based on cost?

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(3) A retailer pays BHD157.320 for stereo receiver and BHD2.050 in transportation charges. **What is the retailer's cost?**

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(4) A retailer pays BHD47.250 for a mattress and BHD1.220 in transportation charges. **What is the retailer's cost?**

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(5) A retailer pays BHD345.970 for computer and BHD4.740 in transportation charges. If retailer sell a computer for BHD403.710. **What is the retailer's cost and mark-up percentage based on cost?**

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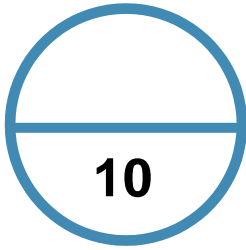
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## EVALUATION

**Q (1)** A retailer's cost for a microwave Oven is BHD80. The retailer wants 60% mark-up based on cost. **What is the selling price? (2 Marks)**

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**Q (2)** A retailer's cost for a fan was BHD12.880. it sold for BHD24.950. **What was the mark-up? (2 Marks)**

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**Q (3)** A retailer pays BHD39.090 for a vacuum cleaner and BHD2.100 in transportation charges. **What is the retailer's cost? (2 Marks)**

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**Q (4)** Complete the following table: **(4 Marks)**

Item	Basic Cost for Retailer BHD	Transportation Cost BHD	Retailer's Cost BHD	Selling Price BHD	Mark-up based on cost
Iron	12.990	.....	14.040	20.980	.....
T.V	.....	1.570	16.800	.....	96%
Oven	135.600	1.140	.....	25.250	.....
Stand Mixer	.....	1.140	.....	28.950	73%

### 3.6 Pricing Goods Based on Selling Price تسعير البضاعة بناءً على سعر البيع



#### Important Points نقاط مهمة

- ▶ Amount of Margin of profit مبلغ هامش الربح

$$\text{Amount of Margin of Profit} = \text{Selling Price} - \text{Cost}$$

- ▶ Percentage of Mark-up نسبة هامش الربح

$$\text{Percentage of Margin of Profit} = \frac{\text{Selling Price} - \text{Cost}}{\text{Cost}} \times 100$$

#### Example 1

- ▶ A retailer sells a television that costs BHD525.750 for BHD679.950. What is the percentage of Mark-up based on the selling price or margin of profit (to the nearest percentage)?

**Solution:**

$$\begin{aligned} \text{Margin of Profit} &= \text{Selling price} - \text{Cost} \\ &= 679.950 - 525.750 = \text{BHD } 154.200 \end{aligned}$$

$$\begin{aligned} \text{Percentage Margin of Profit} &= \frac{\text{Selling price} - \text{Cost}}{\text{Selling price}} \times 100 \\ &= \frac{679.950 - 525.750}{679.950} \times 100 = 22.68\% \end{aligned}$$



## Exercises

(1) A retailer sells a washing machine that costs BHD140.980 for BHD201.950. what is the percentage of Mark-up based on the selling price or margin of profit (to the nearest percentage)?

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(2) A retailer sold a rocking chair that cost BHD98.000 for BHD159.000. What was the percentage of margin of profit based on the selling price?

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## More Exercises

**ملاحظة: طريقة الإجابة عن المسائل القادمة مطابقة لمسائل 3.5، كما يمكنكم مراجعة الكتاب المدرسي أيضاً بدءاً من الصفحة 90.**

(1) The percentage of margin of profit of a refrigerator was 25%. The selling price was BHD579. What was the amount of the margin of profit and cost?

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**(2)** The percentage of mark-up based on the selling price of a stereo was 65%. The selling price was BHD256.950. **What was the margin of profit?**

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**(3)** A retailer knows that consumers will pay at most BHD21.000 for a men's suit and wants a 30% margin of profit. **What is the maximum cost that the retailer may pay for the dress?**

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**(4)** A retailer knows that consumers will pay at most BHD15.300 for a shirt and wants a 30% margin of profit. **What is the maximum cost that the retailer may pay for the shirt?**

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**(5)** The percentage of margin of profit of a radio was 40%. The selling price was BHD22.500. **What was the percentage based on the selling price or margin of profit (mark-up)?**

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**(6)** A retailer's cost for a jacket is BD35.900. The retailer wants a 35% margin of profit based on the selling price. **What is selling price?**

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### 3.7 Mark-Down تخفيض السعر

Mark-Down

تخفيض السعر

Important Points نقاط مهمة

► Mark-Down مبلغ التخفيض

$$\text{Mark-Down} = \text{Regular Price} - \text{Sale Price}$$

$$\text{Mark-Down} = \text{Regular Price} \times \text{Percentage of Mark-down}$$

► Percentage of Mark-Down نسبة تخفيض السعر

$$\text{Percentage of Mark-Down} = \frac{\text{Regular Price} - \text{Sale price}}{\text{Regular Price}} \times 100$$

#### Example 1

► A casting reel regularly priced at **BHD36.290** is on sale for **BHD29.950**. What is the Mark-down amount and Mark-down percentage?

**Solution:**

$$\begin{aligned} \text{Mark-Down} &= \text{Regular price} - \text{Sale Price} \\ &= 36.290 - 29.950 = \text{BHD } 6.340 \end{aligned}$$

$$\begin{aligned} \text{Percentage of Mark-down} &= \frac{\text{Regular price} - \text{Sale Price}}{\text{Regular price}} \times 100 \\ &= \frac{36.290 - 29.950}{36.290} \times 100 = 17.47\% \end{aligned}$$





## Exercises

**(1)** A retailer sold a television regularly priced at BHD199.950 for BHD129.950. Find the percentage of mark-down on the regular prices for the television?

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**(2)** A book regularly priced at BHD26.250 is on sale for BHD19.950. What is the Mark-down?

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**(3)** A retailer sold a stereo receiver regularly priced at BHD169.950 for BHD119.950. Find the percentage of mark-down on the regular price for the stereo receiver?

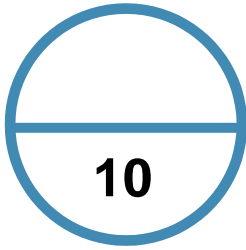
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**EVALUATION**

**Q (1)** A Washing machine regularly priced at BHD120 is on sale for BHD105. **What is the Mark-down percentage? (2 Marks)**

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**Q (2)** A casting reel regularly priced at BHD 36 is on sale for BHD 31.500. **What is the percentage of Mark-down? (2 Marks)**

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**Q (3)** Complete the following table: **(6 Marks)**

No	Item	Regular price BHD	Sale price BHD	Percentage of mark down on sale price	Percentage of mark down on regular price
a	Suit	.....	88.560	.....	29%
b	Shirt	43.990	27.660	.....	.....
c	Book	.....	7.850	33 <sup>1</sup> / <sub>3</sub> %	.....

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# Unit (4)

## الوحدة الرابعة

Simple Interest

الفائدة البسيطة

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### Content:

- ▶ 4.2 Formula of Simple Interest & amount
- ▶ 4.3 Simple Interest Solved Example
- ▶ 4.4 Exact and Trade Interest
- ▶ 4.5 Finding Factors of Simple Interest

# Unit 4

## Simple Interest

### الفائدة البسيطة

#### 4.2 Formula of simple Interest & amount معادلة الفائدة البسيطة والمبلغ



#### Formula (1)

Simple Interest = Principal x Interest Rate x Time

$$\begin{array}{ccccccc} \text{SI} & = & \text{P} & \times & \text{R} & \times & \text{T} \\ \downarrow & & \downarrow & & \downarrow & & \downarrow \\ \text{الفائدة البسيطة} & = & \text{المبلغ الرئيسي} & \times & \text{معدل الفائدة} & \times & \text{الفترة (المدة)} \end{array}$$



#### Formula (2)

Amount = Principal + Interest Rate

$$A = P + R$$

OR

$$A = P (R \times T + 1)$$

#### ► الفترة (المدة) Time

تغيير طريقة حساب المدة بحسب المسألة كالتالي:

Simple Interest = Principal x Interest Rate x Time

$$\text{SI} = \text{P} \times \text{R} \times \text{T}$$

إذا كان بالسنوات يكتب الرقم فقط مثل: 3

إذا كان بالأشهر يكتب هكذا:  $\frac{3}{12}$

إذا كان بالأيام يكتب هكذا:  $\frac{3}{360}$

إذا كان بالأيام و الأشهر يكتب هكذا:  $(\frac{3}{12} + 3)$

### 4.3 Simple Interest Solved Example أمثلة على الفائدة البسيطة

(A) Simple Interest - Years (الفائدة البسيطة بالسنوات)



#### Example 1

► Huda **invested BHD5,000** in N.B.B with **interest rate of 4%**. How much interest would she earn **after 3 years**? What is the **total amount of her investment**?

**Solution:**

$$SI = P \times R \times T$$
$$= 5,000 \times 4\% \times 3 = \text{BHD}600$$
$$A = P + SI$$
$$= 5,000 + 600 = \text{BHD}5,600$$



#### Exercises

(1) Saeed opens a saving account in a bank with an annual interest rate 2.5%. if he deposits BHD580 to the account, how much interest will he earn after 4 years?

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(2) Find the simple interest on BHD10,500 at  $4\frac{1}{2}$  for 5 years?

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**(3)** Ahmed invested BHD2,400 in a bank at simple interest rate 8% annually. What's the balance of the investment after 6 years?

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**(4)** Amal has BHD4,800 in her saving account. The annual simple interest rate 3.9%. How much money will be in her account in 2 year's time?

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**(5)** A trader borrowed BHD6,000 from BBK for 3.5 years at 5% simple annual interest. Find the interest and the total repaid at the end of period?

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**(6)** Mariam borrowed BHD38,000 as a student loan. The annual simple interest rate on her loan was 8.25%. She will be paying this loan off for 10 years. How much will Mariam pay?

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**(7)** Calculate the simple interest and amount of the following:

No	Principal	Interest Rate	Time / Period	Interest	Amount
1	BHD 2,750	10%	8 Years	BHD .....	BHD .....
2	\$ 800	7¼%	Six Years	\$ .....	\$ .....

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**(8)** Calculate the simple interest and amount of the following:

No	Principal	Interest Rate	Time / Period	Interest	Amount
1	BHD 4,250	12%	Three Years	BHD .....	BHD .....
2	\$ 1,200	2¾%	4.5 Years	\$ .....	\$ .....

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(B) Simple Interest - Months **الفائدة البسيطة (بالأشهر)**

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
31	28/29	31	30	31	30	31	31	30	31	30	31

 **Example 2**

► Nasser **deposited BHD1,000** into a saving account at a Bank for **9 months**. The annual simple **interest rate** on this account is **3.5%**. **How much will Nasser have at the end of that period?**

**Solution:**  $SI = P \times R \times T$   
 $= 1,000 \times 3.5\% \times \frac{9}{12} = \text{BHD}26.250$

$$A = P + SI$$
$$= 1,000 + 26.250 = \text{BHD}1,026.250$$

 **Exercises**

(1) What is the interest on BHD8,400 invested for 6 months in a bank at annual simple interest rate 7%?

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(2) Nasser has a saving account with simple interest rate of 3.3% in a bank. If he deposits BHD1,200. How much would his investment worth after 10 months?

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(3) Ahmed and Osama are comparing their loans. Ahmed borrowed BHD4,000 at 6% for two years and Osama borrowed BHD3,000 at 7% for 18 months. Who will bear the most interest?

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(C) Simple Interest – Years & Months **الفائدة البسيطة (بالسنوات و الأشهر)**

 **Example 3**

► **BHD7,500** is deposited at simple **interest rate 12%** per year. **Find the balance after 2 years and 5 months?**

**Solution:**  $SI = P \times R \times T$   
 $= 7,500 \times 12\% \times \frac{29}{12}$   
 $= \text{BHD}2,175$

2 years = 24 months  
+ 5 months  
**29 months**

$$A = P + SI$$
$$= 7,500 + 2,175 = \text{BHD}9,675$$

 **Exercises**

**(1)** Calculate the simple amount interest on BHD900 at an annual simple interest rate  $6\frac{3}{4}$  for one year and two months?

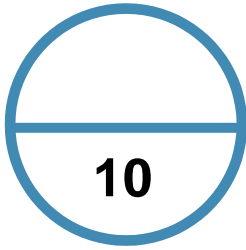
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**(2)** Nawal wants to borrow BHD4,000. If she was charged simple interest rate of 7% annually and the loan duration is three years and 8 months, how much will she repay?

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**(3)** An investment of BHD5,000 with simple interest rate of 9% annually. How much is it worth at the end of 4 years and 9 months?

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**EVALUATION**

**Q(1)** A trader borrowed BHD8,000 from BBK for 5 years at 4% simple annual interest. Find the interest and the total repaid at the end of period? **(3 marks)**

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**Q(1)** What is the interest on BHD8,500 invested for 6 months in a bank at annual simple interest rate 6%? **(3 marks)**

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**Q(1)** An investment of BHD3,000 with simple interest rate of 6% annually. How much is it worth at the end of 5 years and 9 months? **(3 marks)**

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(D) Simple Interest – Days (Counting Days) **الفائدة البسيطة (بالأيام) – حساب الأيام**

You have two ways to find the number of days

Manually يدوياً



Using the timetable

باستخدام جدول الأوقات



Years السنوات

Regular الطبيعية

تعرف السنة العادية عندما يتم  
قسمتها على (4) ويكون ناتج القسمة  
فيه كسور

ويكون فيها شهر فبراير (28) يوم

مثال:

$$\frac{2023}{4} = 505.75$$

Leap الكبيسة

تعرف السنة بالكبيسة عندما يتم  
قسمتها على (4) ويكون ناتج القسمة  
بلا كسور

ويكون فيها شهر فبراير (29) يوم

مثال:

$$\frac{2024}{4} = 506$$



قانون حساب الأيام

$$\text{Time (T)} = T2 - T1$$

التاريخ الثاني  
في المسألة

التاريخ الأول  
في المسألة



### Example 4

► Find the number of days from **3<sup>rd</sup> May 2022** to **13<sup>th</sup> September 2022**.

**Solution:** T1 = 3<sup>rd</sup> May 2022 , T2 = 13<sup>th</sup> September 2022



Manually



From 3 <sup>rd</sup> May 2022	Jun 2022	Jul 2022	Aug 2022	To 13 <sup>th</sup> Sep 2022
28	30	31	31	13

= 133 days

Using The Timetable



T1 = 3<sup>rd</sup> May 2022 = 123 days

T2 = 13<sup>th</sup> September 2022 = 256 days

$$\begin{aligned} \text{Time (T)} &= T2 - T1 \\ &= 256 - 123 = 133 \text{ days} \end{aligned}$$



### Exercises

(1) Find the number of days from 15 March, 2020 to 18 October, 2020.

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(2) Compute time (duration) of the following:

a) 16/2/2020 to 10/10/2020

b) 17/1/2022 to 22/9/2022

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### Example 5

► Find the number of days from **9<sup>th</sup> November 2019** to **14<sup>th</sup> July 2020**.

**Solution:**

T1 = 9<sup>th</sup> November 2019, T2 = 14<sup>th</sup> July 2020



**Manually** →

From 9 <sup>th</sup> Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	To 14 <sup>th</sup> Jul 2020
21	31	31	29	31	30	31	30	14

= 248 days

**Using The Timetable** →

T1 = 9<sup>th</sup> November 2019 = 313 days  
 T2 = 14<sup>th</sup> July 2020 = 195 days

إذا وقع شهر (2) في الفترة المطلوبة والسنة كبيسة

$$\begin{aligned} \text{Time (T)} &= 365 - T1 + T2 = \text{Answer} + 1 \\ &= 365 - 313 + 195 = 247 + 1 = 248 \text{ days} \end{aligned}$$



### Exercises

(1) Find the exact number of days from 24<sup>th</sup> Nov 2021 to 5<sup>th</sup> Apr 2022.

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(2) Compute time (duration) of the following:

- a) 22/11/2022 to 22/9/2023
- b) 9 Sep 2023 to 18 Mar 2024

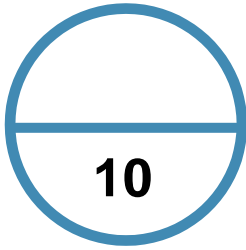
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**Q(1)** Find the number of days from 4<sup>th</sup> Jun 2000 to 31<sup>st</sup> Dec 2000. **(3 marks)**

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**Q(2)** Find the number of days from 28<sup>th</sup> Jul 2006 to 27<sup>th</sup> Sep 2006. **(3 marks)**

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**Q(2)** Find the number of days from 10<sup>th</sup> Nov 2010 to 17<sup>th</sup> Mar 2011. **(4 marks)**

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## 4.4 Exact and Trade Simple Interest الفائدة البسيطة الدقيقة والتجارية



Trade (**Ordinary**) simple Interest: الفائدة البسيطة التجارية

360 Days

This method **is used** if it's required or when type of interest is not mentioned.

$$\text{Trade S.I: } T.I = P \times R \times T \div 360$$



Exact simple Interest: الفائدة البسيطة الدقيقة

365 Days

This method **is used** if it's required or if currency is Sterling Pound (£) or Kuwaiti Dinar (KD).

$$\text{Exact S.I: } E.I = P \times R \times T \div 365$$



### Example 1

► Ali invested **BHD 2,000** at **6%** for **120** days. Find the Trade and Exact simple interested?

**Solution:**

<u>Trade</u>	<u>Exact</u>
$T.I = P \times R \times \frac{T}{360}$	$E.I = P \times R \times \frac{T}{365}$
$= 2,000 \times 6\% \times \frac{120}{360}$	$= 2,000 \times 6\% \times \frac{120}{365}$
$= \text{BHD } 40$	$= \text{BHD } 39.452$





## Exercises

(1) Find the **Trade** and the **Exact** interest of a BHD9500 loan for 250 days, if the simple interest rate is 8% annually?

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(2) Find the difference between the **Exact** interest and the **Trade** interest for BHD3,000 invested for 90 days at a 3.5% annual interest rate. Which type of interest is preferable for your investment?

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(3) A trader invested £2000 in a bank at the simple interest rate 6.5%. What is the amount of the investment after 155 days?

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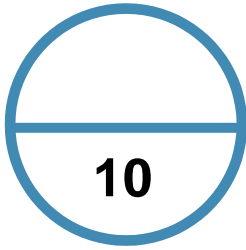
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**Q(1)** Abdula invested BHD3,200 at 4% for 270 days. **Find the trade and exact simple interest.** (5 marks)

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**Q(2)** Find the simple interest for the following: (5 marks)

- a) BHD5,550 for 120 days at 4% annually.
- b) KD3,000 for 60 days at 6% annually.

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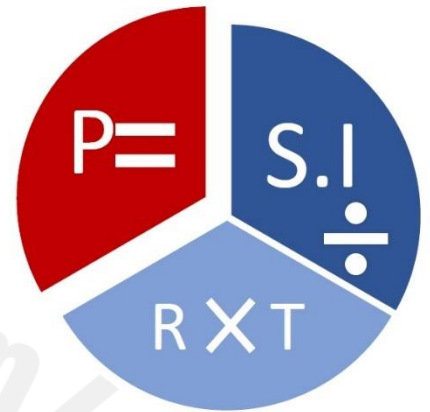
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## 4.5 Finding Factors of Simple Interest إيجاد قيمة عناصر الفائدة البسيطة

Important Points نقاط مهمة

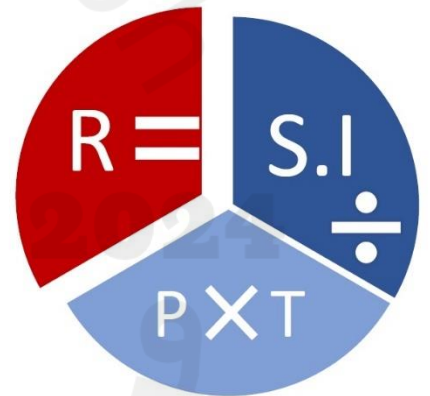
a- To Find the Principal:

$$P = \frac{SI}{R \times T}$$



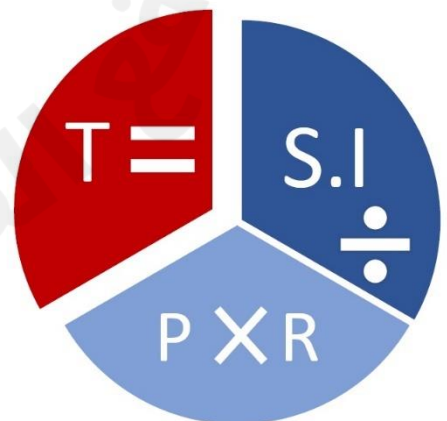
b- To Find the Interest Rate:

$$R = \frac{SI}{P \times T}$$



c- To Find the Time:

$$T = \frac{SI}{P \times R}$$





### Example 1

► Salman wanted to borrow some money to expand his business. He was told he could borrow a sum of money for **18 months** at **6%** simple interest per year. He thinks he can afford to pay as much **BHD540** in interest charges. **How much money could he borrow?**

**Solution:**  $SI = \text{BHD}540$  ,  $R = 6\%$  ,  $T = \frac{18}{12} = 1.5$  years

$$P = \frac{SI}{R \times T} = \frac{540}{6\% \times 1.5} = \text{BHD}6,000$$



### Exercises

**(1)** Mariam wanted to borrow some money for 18 months at 8% simple interest to pay BHD150. How much money could she borrows?

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**(2)** Find the Principal of two-years loan, lent at 12% interest per year. The total repayment amount is BHD12,400?

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**(3)** Danna paid BHD675 interest for one-year and half at the simple interest rate is 10% paid annually. What was the principal?

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## Example 2

► The owner of a restaurant borrowed BHD1,800 for 1.5 years to buy a food preparation table for his restaurant. If he paid BHD202.500 simple interest on the loan. **What rate of interest did he pay?**

**Solution:**  $SI = \text{BHD}202.500$  ,  $P = 1,800$  ,  $T = 1.5$  years

$$R = \frac{SI}{P \times T} \times 100 = \frac{202.500}{1,800 \times 1.5} \times 100 = 7.5\% \text{ annually}$$



## Exercises

**(1)** What is the interest rate of a loan of BHD2680, if BHD636.500 interest is paid the loan duration is two years and six months?

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**(2)** Find the simple interest rate of a BHD5000 loan that is made for three years and requires BHD1762.500 in interest.

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**(3)** Yasir borrowed BHD 6000 for 3.5 years and paid BHD2800 simple interest. What was the annual interest rate?

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### Example 3

► Hamad borrowed BHD2,400 at 7% simple interest per year to buy a new computer for his business. If he paid BHD420 interest, What was the duration (time) of the loan?

**Solution:**  $SI = \text{BHD}420$  ,  $R = 7\%$  ,  $P = \text{BHD}2,400$

$$T = \frac{SI}{P \times R} = \frac{420}{2,400 \times 7\%} = 2.5 \text{ years}$$



### Exercises

(1) A loan of BHD16840 is borrowed at 9% simple interest and is repaid with BHD4167.90 interest. What is the duration (Time/Period) of the loan?

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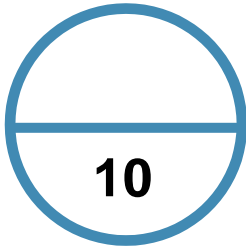
(2) Aisha borrowed BHD1500 at 8% annual simple interest. If she paid BHD866.250 interest, what is the time period of the loan?

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.....  
.....

(3) Find the unknown factors the following:

P	T	R	SI	A
BHD 450	..... days	5%	BHD 7.500	BHD .....

.....  
.....  
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**Q(1)** A trader borrowed BHD5,000 at 6% simple interest per year to buy a new truck for his business. If he paid BHD900 interest, what was the duration (time) of the loan? **(3 marks)**

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**Q(2)** Find the unknown factors of the following, showing the steps of solution below: **(4 marks)**

No	Principal	Interest Rate	Time/Period	Simple Interest	Amount
a	BHD 2000	5%	135 days	BHD .....	BHD .....
b	BHD 3200	8½%	..... years	BHD .....	BHD 4832

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.....

**Q(3)** Find the unknown factors of the following, showing the steps of solution below: **(3 marks)**

No	Principal	Interest Rate	Time/Period	Simple Interest
a	BHD 1000	7%	5 years	BHD .....
b	BHD .....	6.5%	10 months	BHD 81.250
c	KWD 2000	..... %	135 days	KWD 59.178

.....

.....

.....



## Appendix (A)

### Timetable

Days of month	31	28	31	30	31	30	31	31	30	31	30	31
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1	32	60	91	121	152	182	213	244	274	305	335
2	2	33	61	92	122	153	183	214	245	275	306	336
3	3	34	62	93	123	154	184	215	246	276	307	337
4	4	35	63	94	124	155	185	216	247	277	308	338
5	5	36	64	95	125	156	186	217	248	278	309	339
6	6	37	65	96	126	157	187	218	249	279	310	340
7	7	38	66	97	127	158	188	219	250	280	311	341
8	8	39	67	98	128	159	189	220	251	281	312	342
9	9	40	68	99	129	160	190	221	252	282	313	343
10	10	41	69	100	130	161	191	222	253	283	314	344
11	11	42	70	101	131	162	192	223	254	284	315	345
12	12	43	71	102	132	163	193	224	255	285	316	346
13	13	44	72	103	133	164	194	225	256	286	317	347
14	14	45	73	104	134	165	195	226	257	287	318	348
15	15	46	74	105	135	166	196	227	258	288	319	349
16	16	47	75	106	136	167	197	228	259	289	320	350
17	17	48	76	107	137	168	198	229	260	290	321	351
18	18	49	77	108	138	169	199	230	261	291	322	352
19	19	50	78	109	139	170	200	231	262	292	323	353
20	20	51	79	110	140	171	201	232	263	293	324	354
21	21	52	80	111	141	172	202	233	264	294	325	355
22	22	53	81	112	142	173	203	234	265	295	326	356
23	23	54	82	113	143	174	204	235	266	296	327	357
24	24	55	83	114	144	175	205	236	267	297	328	358
25	25	56	84	115	145	176	206	237	268	298	329	359
26	26	57	85	116	146	177	207	238	269	299	330	360
27	27	58	86	117	147	178	208	239	270	300	331	361
28	28	59	87	118	148	179	209	240	271	301	332	362
29	29	0	88	119	149	180	210	241	272	302	333	363
30	30	0	89	120	150	181	211	242	273	303	334	364
31	31	0	90	0	151	0	212	243	0	304	0	365

Table (4-3-1): Exact days in a year calendar

## Appendix (B)

### Dictionary

#### معاني بعض المفردات المهمة للوحدة الأولى

الكلمة	المعنى
Value	القيمة
Place value	القيمة المكانية / مرتبة العدد
Currency system	النظام النقدي
Finance	تمويل
Rate of exchange	سعر الصرف
Float system	نظام نقدي عائم (يعتمد العرض و الطلب)
Fix system	نظام نقدي ثابت (ربط بعملة أخرى)
Buying price	سعر الشراء
Buying rate	سعر الشراء (العملة )
Draft rate	سعر التحويل (للعلمة)
Teller	الصراف
Foreign currency	العملة الأجنبية
Convert	تحويل/يُحول ( عملات )

## معاني بعض المفردات المهمة للوحدة الثانية

المعنى	الكلمة
أجر	Wage
المدفوعات / الدفع	payment
طرق المدفوعات / الدفع	Payment method
لكل ساعة ( الدفع )	Payment per hour
لكل أسبوع ( الدفع )	Payment per week
لكل شهر ( الدفع )	Payment per month
لكل سنة ( الدفع )	Payment per year
أجر بنظام القطعة	Piece rate of system
أجر بنظام العمولة (العلاوة)	Bonus system
عمولة	Commission
قطاع	Sector
القطاع الخاص	Private sector
القطاع العام (الحكومي)	Public sector
القطاع العام (الحكومي)	Government sector
ساعات العمل الفعلية	Effective working hours
مساوي / معادل	Equivalent
عامل	Employee
صاحب العمل	Employer
ساعات عمل إضافية (نهائية)	Day O.T
ساعات عمل إضافية ( ليلية )	Night O.T
إنتاج	Production
راتب بالعمولة	Payroll by commission
راتب بالعمولة (العلاوة)	Payroll by bonus
عمولة مباشرة	Straight commission
عمولة بالحجم	Volume commission
عمولة متدرجة	Graduated commission
قيمة العمولة	Value commission

Percentage commission	نسبة العمولة
Goods	بضاعة
Incentive	حافز
Amount	مبلغ ( حاصل الجمع )
Transaction	عملية مالية / تجارية (صفقة)
Sales	المبيعات
Total Amount	إجمالي المبلغ
Sales man	رجل مبيعات
Sales employee	موظف مبيعات
Sales person	رجل مبيعات
Basic salary	الأجر الثابت
Gross salary	الراتب الإجمالي
Net salary	صافي الراتب (بعد الاستقطاع)
Annual	سنوي
Income	دخل
Total income	إجمالي الدخل
Sell	يبيع
Sold	باع
Deduction	استقطاع
Pension fund deduction	استقطاع التقاعد (قطاع عام)
Social insurance deduction	استقطاع تقاعد (قطاع خاص)
Unemployment deduction	تأمين التعطل (استقطاع للتعطل)
Statutory deduction	استقطاع قانوني
Non-statutory deduction	استقطاع (اتفاقي)
Fix allowance	علاوة ثابتة
Allowance	علاوة
Merchandise	بضاعة / تجارة
Addition / add	يضيف / يزيد

### معاني بعض المفردات المهمة للوحدة الثالثة

الكلمة	المعنى
Trade discount	الخصم التجاري
Discount rate	معدل الخصم
Cash discount	خصم نقدي
Retail	تاجر تجزئة
Merchant	تاجر
List price	السعر المعروض
Net price	السعر بعد الخصم (النهائي)
Product	المنتج
Invoice	فاتورة
Invoice rate	معدل الفاتورة
Date received	تاريخ الاستلام
Unit price	سعر الوحدة
Total price	إجمالي السعر
Quantity	الكمية
Discount card	بطاقة خصم
Promotion	ترويج
E.O.M	نهاية الشهر
R.O.G	استلام البضاعة
Freight	اجور الشحن
Bill	فاتورة
Value Added Tax	ضريبة القيمة المضافة
Exempt	معفى من الضريبة
Exempted items	منتجات معفية من الضريبة
Standard rated items	العناصر المعدل الإعتيادية
Tax	ضريبة
Zero rated items	صفر %
Out of scope items	عناصر خارج النطاق

Fees	رسوم / اتعاب
Insurance	تأمين
Import	استيراد
Export	تصدير
Real estate	القطاع العقاري
Financial services	خدمات مالية
Commodities	بضائع
International trade	تجارة دولية
Excise goods	سلع خاصة
Excise rate	نسبة الضريبة على السلع الخاصة
NBR	الهيئة الوطنية للإيرادات
Tariffs	تعرفة
Custom tariffs	رسوم (تعرفة) جمركية
Free duty exempt	معفى من الضريبة
Pricing goods	تسعير البضائع
Cost price	سعر التكلفة
Charge	رسوم / مصاريف
Telephone charges	رسوم التلفون
Water charges	رسوم الماء
Electricity charges	رسوم الكهرباء
Mark up	هامش الربح
Mark up percentage	نسبة هامش الربح
Cost	التكلفة
Maximum cost	التكلفة القصوى (الأعلى)
Minimum cost	اقل تكلفة
mark up based on cost	هامش الربح قياساً بالتكلفة
Margin of profit	هامش الربح
Selling percentage	نسبة البيع

Cost percentage	نسبة التكلفة
Mark down	تخفيض السعر
Percentage of mark down	نسبة تخفيض السعر
Regular price	السعر الاعتيادي ( ما قبل الخصم)
Sale price	السعر ( ما بعد الخصم)
Sale price percentage	نسبة الخصم ( من السعر الاعتيادي)
purchase	يشترى
Discount	الخصم
Raw material	مواد خام
duty	رسوم ضريبية على الاستيراد و التصدير
Free duty	معفى من الضريبة



## معاني بعض المفردات المهمة للوحدة الرابعة

الكلمة	المعنى
Interest	الفائدة
Simple interest	الفائدة البسيطة
Compound interest	الفائدة المركبة
Loan	قرض
Time value of money	القيمة الزمنية للنقود
Principal (p.v.)	القيمة الحالية
Present value	القيمة الحالية
Future value	القيمة المستقبلية
Borrow	يقترض
Borrowing period	مدة الاقتراض
Interest rate	معدل الفائدة
Time	المدة
Saving account	حساب توفير
Annually	سنوي
Per Annum	سنوي
Investment	استثمار
Invested	يستثمر / استثمر
Leap year	سنة كبيسة
Sum	المبلغ (الإجمالي)
Repayment	إعادة الدفع
Exact interest	الفائدة الدقيقة
Trade interest	الفائدة التجارية
Deposit	إيداع