

Spreadsheets - Project

Computer Shop



Starter – IF Statement

If the **units sold** is **more than or equal** to the **targets sales** than the **target has been met**.

4	Tv Shows	Season	Units Sold	Target Sales	Price	VAT	Final Price	Total Sum	on target
5	Once Upon A Time	2	23	15	£12.50	£ 2.19	£ 14.69	£ 337.81	=IF(C5>=D5,"on target","off target")

C5

D5

1. Logical Test

Is units sold more than or equal to the target sales.

2. If the statement is **true** then the **"true statement"** will be printed in the cell.

3. If the statement is **false** then the **"false statement"** will be printed in the cell.

=IF(C5>=D5,"on target","off target")

1. Logical Test

2. True

3. False



Greater Than



Less Than



Greater/Less Than and equal to

Project Overview

Objectives

Understand the effects of changing data within your spreadsheet (modelling).

Understanding the need to present information in different forms (graphs)

Understanding the use of complex formulas and function (If statements)

Understand the need to test formulas and functions for errors making necessary changes and identify improvements.

Outcomes

Time

Task 1	Expenditure 1 - Utilities	150
Task 2	Expenditure 2 - Salaries	100
Task 3	Income - Sales	50
Task 4	Graphs	0

Task 1 – Expenditure 1 - Utilities

1) Enter the **monthly budget** for each expenditure cost.
You can make this value up.

2) Enter the **actual monthly** expenditure costs. **Refer to Email**

3) Work out the **TAX** on the **Monthly Expenditure** Costs. For Total Add the Monthly and Tax together.

4) Work out the expenditure costs for 3, 6 and 12 months.

5) Write an **IF statement** to state whether the actual monthly cost is within the budget.

True - Within Budget
False - Over Budget

6) Enter the Total, Max, Min and Average Functions for the shaded columns.

Type of Expenditure	Monthly Budget	Actual Costs						Within Monthly Budget
		Monthly	Tax	Total	3 Months	6 Months	12 Months	
Rent								
Gas								
Electricity								
Water								
Telephone								
Internet								
Insurance								
Promotion - Internet								
Promotion - Newspaper								
Job Adverts								
Service and Maintenance								
Additional Costs								
Total								
Max								
Min								
Average								

Use this **value** to work out the **tax**. Use **absolute cell referencing**.

Task 1 – Expenditure 1 - Utilities

Email:

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Expenditure Figures

Cc Bcc

These are previous months Expenditure costs:

- Rent - **£500.00**
- Gas - **£200.00**
- Electricity - **£250.00**
- Water - **£175.00**
- Telephone - **£50.00**
- Internet - **£25.00**
- Insurance - **£35.00**
- Promotion - Internet - **£60.00**
- Promotion - Newspaper - **£60.00**
- Job Adverts - **£100.00**
- Service and Maintenance - **£250.00**
- Additional Costs - **£125.00**

Kind Regards

Admin Manager

**Actual monthly
expenditure costs.**

Computer Shop - Expenditure 1 - Utilities							
Type of Expenditure	Monthly Budget	Monthly	Actual Costs				Within Monthly Budget
			Tax	Total	3 Months	6 Months	
Rent							
Gas							
Electricity							
Water							
Telephone							
Internet							
Insurance							
Promotion - Internet							
Promotion - Newspaper							
Job Adverts							
Service and Maintenance							
Additional Costs							
Total							
Max							
Min							
Average							
	17.50%						

Task 2 – Expenditure 2 - Salaries

1) Enter the **names** for your employees. **Make these names up.**

2) Enter the **hours worked** and their **Pay Per Hour**. **Make these values up.**
 Max hours – 40 hours
 Max Pay Per Hour – 15

3) Work out the employees **weekly and monthly pay**. Then work out the **TAX** on the Monthly Pay.

4) Work out the **Total Pay – Monthly Pay + Tax**

5) Write an **IF statement** to state whether the employee is either Full or Part Time

Part Time - ≤ 15 hours
Full Time - >15 hours

6) Enter the **Total, Max, Min and Average** Functions for the shaded columns.

Use this **value** to work out the **tax**. Use **absolute cell referencing**.

Computer Shop - Expenditure 2 - Salaries									
Employee Name	Position	Hours Work	Pay Per Hour	Weekly Pay	Monthly Pay	Tax	Total Pay	Full or Part Time	
	Manager								
	Deputy								
	Deputy								
	Admin								
	Sales Assistant								
	Sales Assistant								
	Sales Assistant								
	Sales Assistant								
	Cleaner								
	Cleaner								
							Total		
							Max		
							Min		
							Average		

17.50%

Task 3 – Income - Sales

1) Enter the weekly sale figures. Refer to the email. Enter a sum function to calculate the monthly sales.

2) Work out the Total. Monthly Sales * Cost. Work out the Tax on the Total Figure

4) Add the Total and Tax together.

5) Work out the total Expenditure and Income.

Then Enter a **IF statement** to work out if the shop is in profit.

If **Sales is More than the expenditure total** then you are in **profit**. If not you have made a **loss**.

6) Enter the Total, Max, Min and Average Functions for the shaded columns.

Computer Shop - Income Sales										
Item Name	Type	Cost	Sold				Monthly Sales	Total (Cost * Monthly Sales)	Tax	Total inc Tax
			Week 1	Week 2	Week 3	Week 4				
7	Ipad	Tablet	£300.00							
8	Sony Xperia	Tablet	£275.00							
9	Google Nexus	Tablet	£255.00							
10	Galaxy Tab	Tablet	£275.00							
11	Iphone 5	Mobile	£300.00							
12	Samsung s4	Mobile	£280.00							
13	HTC One	Mobile	£200.00							
14	Asus VivoBook	Laptop	£400.00							
15	ASUS X200	Laptop	£450.00							
16	Apple MacBook	Laptop	£650.00							
17	Sony Vaio	Laptop	£500.00							
18	Lenovo G505	Laptop	£350.00							
19	Microsoft Office	Software	£200.00							
20	Adobe Suite CSS	Software	£250.00							
21	Windows 8	Software	£100.00							
22	Windows 7	Software	£ 90.00							
23	Nortons Anti Virus	Software	£ 35.00							
24										
25										
26										
27										
28										

Total Figures	
Ex - Utilities	
Ex - Salaries	
Total	
In - Sales	
Profit/Loss	

Task 3 – Income - Sales

Email:

Sales Figures

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These are previous months sales figures:

Item Name	Week 1	Week 2	Week 3	Week 4
<u>Ipad</u>	23	34	53	23
<u>Sony Xperia</u>	21	32	23	32
<u>Google Nexus</u>	5	3	2	5
<u>Galaxy Tab</u>	5	10	8	9
<u>Iphone 5</u>	23	40	10	12
<u>Samsung s4</u>	12	34	54	10
<u>HTC One</u>	2	5	7	8
<u>Asus VivoBook</u>	1	2	4	3
<u>ASUS X200</u>	5	6	5	2
<u>Apple MacBook</u>	11	2	4	13
<u>Sony Vaio</u>	12	4	12	3
<u>Lenovo G505</u>	3	6	3	4
<u>Microsoft Office</u>	12	3	4	9
<u>Adobe Suite CS5</u>	5	4	3	12
<u>Windows 8</u>	6	12	17	12
<u>Windows 7</u>	1	2	4	2
<u>Nortons Anti Virus</u>	5	4	4	3

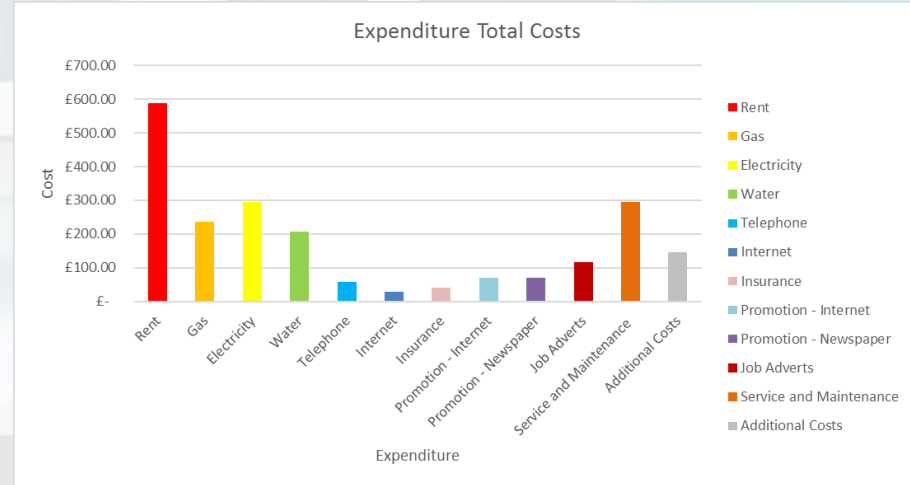
Kind Regards

Enter the sales figures in the cells shown below.

Item Name	Type	Cost	Sold				Monthly Sales	Total (Cost * Monthly Sales)	Tax	Total Inc Tax	Total Figures	
			Week 1	Week 2	Week 3	Week 4					Ex - Utilities	Ex - Salaries
Ipad	Tablet	£300.0									Total	
Sony Xperia	Tablet	£275.0									In - Sales	
Google Nexus	Tablet	£255.0									Profit/Loss	
Galaxy Tab	Tablet	£275.0										
Iphone 5	Mobile	£300.0										
Samsung s4	Mobile	£280.0										
HTC One	Mobile	£200.0										
Asus VivoBook	Laptop	£400.0										
ASUS X200	Laptop	£450.0										
Apple MacBook	Laptop	£650.0										
Sony Vaio	Laptop	£500.0										
Lenovo G505	Laptop	£350.0										
Microsoft Office	Software	£200.0										
Adobe Suite CS5	Software	£250.0										
Windows 8	Software	£100.0										
Windows 7	Software	£ 90.0										
Nortons Anti Virus	Software	£ 35.0										
											Total	
											Max	
											Min	
											Average	

Task 4 – Creating Graphs

Computer Shop - Expenditure					
Type of Expenditure	Monthly Budget	Actual Costs			
		Monthly	Tax	Total	
Rent	£ 600.00	£ 500.00	£ 87.50	£ 587.50	
Gas	£ 200.00	£ 200.00	£ 35.00	£ 235.00	
Electricity	£ 350.00	£ 250.00	£ 43.75	£ 293.75	
Water	£ 175.00	£ 175.00	£ 30.63	£ 205.63	
Telephone	£ 60.00	£ 50.00	£ 8.75	£ 58.75	
Internet	£ 25.00	£ 25.00	£ 4.38	£ 29.38	
Insurance	£ 45.00	£ 35.00	£ 6.13	£ 41.13	
Promotion - Internet	£ 60.00	£ 60.00	£ 10.50	£ 70.50	
Promotion - Newspaper	£ 40.00	£ 60.00	£ 10.50	£ 70.50	
Job Adverts	£ 100.00	£ 100.00	£ 17.50	£ 117.50	
Service and Maintenance	£ 200.00	£ 250.00	£ 43.75	£ 293.75	
Additional Costs	£ 125.00	£ 125.00	£ 21.88	£ 146.88	



Create a **vertical bar chart** to show the **total cost** for each **expenditure**. Include the following:

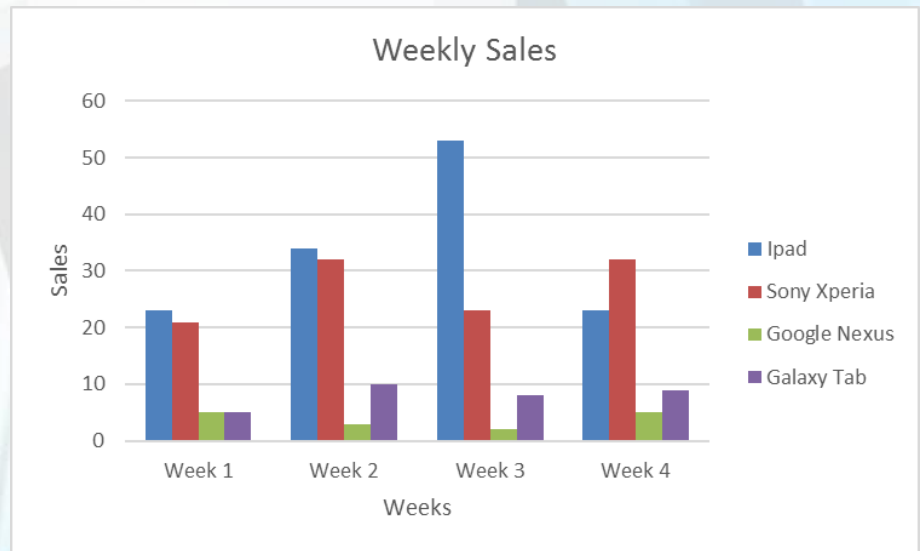
- Legend
- Suitable Title
- Axis Labels

Task 4 – Creating Graphs

				Sold			
Item Name	Type	Cost	Week 1	Week 2	Week 3	Week 4	
Ipad	Tablet	£300.00	23	34	53	23	
Sony Xperia	Tablet	£275.00	21	32	23	32	
Google Nexus	Tablet	£255.00	5	3	2	5	
Galaxy Tab	Tablet	£275.00	5	10	8	9	

Create a **vertical bar chart** to show the **weekly sales** for each **tablet**. Include the following:

- Legend
- Suitable Title
- Axis Labels



Plenary – Refer to the Lesson Objectives

Objectives

Understand the effects of changing data within your spreadsheet (modelling).

Understanding the need to present information in different forms (graphs)

Understanding the use of complex formulas and function (If statements)

Understand the need to test formulas and functions for errors making necessary changes and identify improvements.

Plenary Task (Q&A)

Discuss why you would use a spreadsheet to complete this task.