

Level 4



# SPREADSHEETS



## Practice Exercises

[WWW.EDUCOOT.ORG](http://WWW.EDUCOOT.ORG)

## Note to Tutors and Students

Level 4 Spreadsheets is part of **Level 4 Computer Applications 4N1112**.

- ☐ It would be better to print these projects and have them next to you as you work on the computer.
- ☐ All files to be downloaded can be found here: <http://educoot.org/for-tutors/> (under Level 4 Spreadsheets)
- ☐ Don't forget to learn the theory of Spreadsheets too; this resource contains mainly practice exercises for the practical part of the examination. Theory questions can be found in later projects in this resource.

### Learning outcomes related to Spreadsheets:

- ☐ Describe the structure of a spreadsheet
- ☐ Identify applications suitable for spreadsheets
- ☐ Use the terminology appropriate to database software, spreadsheet software and graphics software accurately



- ☐ Use spreadsheet software to create a spreadsheet to include enter and edit numeric and character data
- ☐ Modify a spreadsheet by inserting and deleting rows and columns, adjusting column widths and formatting column entries
- ☐ Apply a range of formulae and functions over a range of cells using relative cell references to include mathematical operators, SUM and AVERAGE functions

## Example: Assessment Brief

### Assessment Brief: Spreadsheets

**Component title:** Computer Applications

**Component code:** 4N1112

**Assessment technique:** Examination

**Assessment title:** Spreadsheets

**Assessment number:** 2

**Weighting:** 35%

#### Guidelines:

You will be expected to:

1. Demonstrate an understanding of suitable uses for spreadsheets
2. Demonstrate an understanding of appropriate spreadsheet terminology and the structure of a spreadsheet
3. Access a spreadsheet application
4. Create a file for a suitable requirement
5. Enter character and numeric data in a specified location
6. Modify a spreadsheet by inserting and deleting rows and columns
7. Adjust row height and column width where appropriate
8. Insert formulas/functions for basic calculations using relative cell references. (e.g. +, -, \*, /, SUM function, AVERAGE function)
9. Replicate formula
10. Format column entries
11. Format cell alignments
12. Save spreadsheets using correct filename
13. Print spreadsheets correctly
14. Exit spreadsheets

**Assessment criteria:**

Marks could be allocated as follows:

- Demonstrate an understanding of uses for spreadsheets: **5 marks**
- Demonstrate an understanding of appropriate spreadsheet terminology and the structure of a spreadsheet: **5 marks**
- Open the spreadsheet software: **1 mark**
- Create a spreadsheet file by entering and editing numeric and character data: **4 marks**
- Enter and edit data: **1 mark**
- Delete/Insert columns and rows: **2 marks**
- Adjust column widths, row heights: **1 mark**
- Format column entries (label and value data) and cell alignments: **2 marks**
- Apply a range of formula/functions: **12 marks**
- Print spreadsheets correctly: **1 mark**
- Save and exit spreadsheets correctly: **1 mark**

***0.5 marks will be deducted per keystroke error***



Date brief was issued: \_\_\_\_\_

Submission date: \_\_\_\_\_

***I confirm that this is my original work.***

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

# Spreadsheet Project 1

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## A. Setting up a spreadsheet

1. Type in the following spreadsheet, and format it to look like the sample below.
2. Adjust the columns so that all text can be read.

|    | A                | B          | C          | D     |
|----|------------------|------------|------------|-------|
| 1  | Mike's Lunch Bar |            |            |       |
| 2  | Lunch items      | Units sold | Unit price | Sales |
| 3  | Sandwiches       |            |            |       |
| 4  | Paninis          |            |            |       |
| 5  | Salads           |            |            |       |
| 6  | Wraps            |            |            |       |
| 7  | Soup             |            |            |       |
| 8  | Tea              |            |            |       |
| 9  | Coffee           |            |            |       |
| 10 | Fruit juice      |            |            |       |
| 11 | Total sales      |            |            |       |
| 12 | Averages         |            |            |       |



3. Save the spreadsheet as **Lunch\_Bar**.
4. Change the page orientation to Landscape.
5. Centre the spreadsheet heading **Mike's Lunch Bar** across the spreadsheet.  
(Merge and centre)
6. Embolden the heading **Mike's Lunch Bar** and make the font 16 pt.
7. Embolden and centre the column headings:

|   |                         |                   |                   |              |
|---|-------------------------|-------------------|-------------------|--------------|
| 1 | <b>Mike's Lunch Bar</b> |                   |                   |              |
| 2 | <b>Lunch items</b>      | <b>Units sold</b> | <b>Unit price</b> | <b>Sales</b> |

8. Switch on the gridlines for printing.
9. Save the changes.
10. Print one copy of the spreadsheet.

## B. Using formulas

1. Open the file **Lunch\_Bar**.
2. Type in all numbers shown in the spreadsheet below. (Don't type in the euro symbol – format the cells to currency with 2 decimal places)



|    | A                       | B                 | C                 | D            |
|----|-------------------------|-------------------|-------------------|--------------|
| 1  | <b>Mike's Lunch Bar</b> |                   |                   |              |
| 2  | <b>Lunch items</b>      | <b>Units sold</b> | <b>Unit price</b> | <b>Sales</b> |
| 3  | Sandwiches              | 2300              | €5.50             |              |
| 4  | Paninis                 | 1100              | €6.30             |              |
| 5  | Salads                  | 3650              | €6.10             |              |
| 6  | Wraps                   | 630               | €6.30             |              |
| 7  | Soup                    | 1043              | €4.50             |              |
| 8  | Tea                     | 3000              | €3.10             |              |
| 9  | Coffee                  | 2460              | €3.60             |              |
| 10 | Fruit juice             | 2438              | €4.60             |              |
| 11 | Total sales             |                   |                   |              |
| 12 | Averages                |                   |                   |              |

3. Format all numbers with appropriate formats.
4. Create a formula (or use the SUM function) to add up all the units sold.
5. Create a formula to work out the average of units sold.
6. Create a formula to work out the Sales prices. (e.g. Create a formula in D3 to multiply the Units sold by the Unit price: =C3\*B3)
7. Copy the formula down to D10.
8. Work out the Total sales for the Sales column.
9. Apply borders and add some colour shading.
10. Save as **Lunch\_Bar**.
11. Print your document.
12. Exit from the application.

## Spreadsheet Project 2

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### A. Entering numeric and character data

1. Open Microsoft Excel.
2. Change page orientation to Landscape. Enter the following data.

|   | A         | B        | C   | D          |
|---|-----------|----------|-----|------------|
| 1 | ITEM      | NET COST | VAT | TOTAL COST |
| 2 | Bread     | €1.58    |     |            |
| 3 | Milk      | €1.09    |     |            |
| 4 | Sugar     | €2.55    |     |            |
| 5 | Tea       | €3.58    |     |            |
| 6 | Coffee    | €4.78    |     |            |
| 7 | Marmalade | €2.31    |     |            |
| 8 | Shampoo   | €5.21    |     |            |
| 9 | Biscuits  | €3.84    |     |            |



3. Save the spreadsheet as **Grocery**.
4. Centre and embolden the column headings.
5. Change the font of the column headings to red.
6. Give your spreadsheet an overall heading: **Grocery costs**. (You will need to insert a row)
7. Merge and centre your heading.



8. Make your heading bold and 18 pt.
9. Add a row heading under Biscuits and name it TOTAL.
10. Change your page orientation to Landscape.
11. Save all changes.
12. Turn on gridlines for printing. Print your spreadsheet.
13. Close the application.

## B. Using formulas

1. Open the file **Grocery**.
2. Work out the VAT totals for each item using the rate 23%. (Example: In C<sub>3</sub> use the formula =B<sub>3</sub>\*23%. Copy the formula down to C<sub>10</sub>)
3. Create a formula to add the Net Cost + VAT to get the Total costs. (Example: In D<sub>3</sub> use the formula =SUM(B<sub>3</sub>:C<sub>3</sub>))
4. Use the SUM function to add up: the net costs, the VAT costs and the total costs.
5. Embolden all these totals.
6. Save your spreadsheet as **Grocery\_2**.
7. Print your spreadsheet.
8. Exit from the application.



## C. Adding (+), subtracting (-), multiplying (\*)

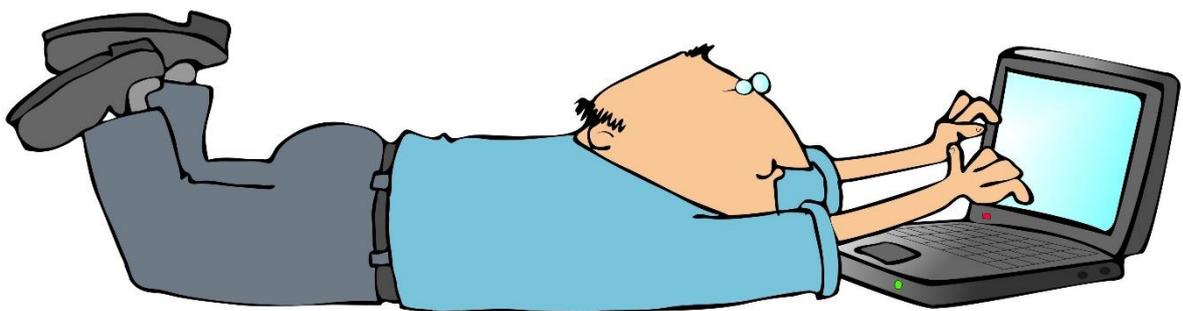
1. Open Microsoft Excel
2. Open the file **Grocery\_2**.
3. Add 2 extra column headings. Make sure these new headings are also red, bold and centred.
4. Merge and centre the overall heading **Grocery Costs**.

|    | A                    | B               | C            | D                 | E                   | F                |
|----|----------------------|-----------------|--------------|-------------------|---------------------|------------------|
| 1  | <b>Grocery Costs</b> |                 |              |                   |                     |                  |
| 2  | <b>ITEM</b>          | <b>NET COST</b> | <b>VAT</b>   | <b>TOTAL COST</b> | <b>DISCOUNT 10%</b> | <b>NEW PRICE</b> |
| 3  | Bread                | €1.58           | €0.36        | €1.94             |                     |                  |
| 4  | Milk                 | €1.09           | €0.25        | €1.34             |                     |                  |
| 5  | Sugar                | €2.55           | €0.59        | €3.14             |                     |                  |
| 6  | Tea                  | €3.58           | €0.82        | €4.40             |                     |                  |
| 7  | Coffee               | €4.78           | €1.10        | €5.88             |                     |                  |
| 8  | Marmalade            | €2.31           | €0.53        | €2.84             |                     |                  |
| 9  | Shampoo              | €5.21           | €1.20        | €6.41             |                     |                  |
| 10 | Biscuits             | €3.84           | €0.88        | €4.72             |                     |                  |
| 11 | <b>TOTAL</b>         | <b>€24.94</b>   | <b>€5.74</b> | <b>€30.68</b>     |                     |                  |

5. Work out the 10% discount of each Total cost. (Example: In E3, use the formula  $D3*10\%$ . Copy the formula down to E10)
6. Work out the New price by subtracting the discount from the Total cost. (Example: In F3, use the formula  $=D3 - E3$ )
7. Use the SUM function to add the totals for the Discount and New price columns.
8. Ensure all totals are bold. (from B11 to F11)
9. Save as **Grocery\_3**.
10. Print one copy of the spreadsheet.
11. Close the application.

## D. Erasing data

1. Open Microsoft Excel
2. Open the file **Grocery\_3**.
3. Delete Row 7. (Coffee)
4. Delete Column C (VAT)
5. Undo this last delete. (deleting the column) To undo your last action, click on Undo or press Ctrl + Z.
6. Save as **Grocery\_4**.
7. Print one copy of the spreadsheet.
8. Exit from the application.



## E. Amending data



1. Open the file **Grocery\_4**.
2. Make the following changes
  - The Net cost for Marmalade has increased in price to €2.48
  - The Net cost for Milk has decreased in price to €0.99
3. Change the VAT rate on the shampoo to 25%.
4. Check that all other columns change with these updated amounts.
5. Save the file as **Grocery\_5**.
6. Print one copy of the spreadsheet.
7. Exit from the application.

## F. Completing the spreadsheet

1. Open the file **Grocery\_5**.
2. Format all numbers to currency (euro) and 2 decimal places.
3. Apply borders and add some colour shading.
4. Save as **Grocery\_6**.
5. Switch on gridlines for printing.
6. Print one copy of your spreadsheet.
7. Exit from the application.



## Spreadsheet Project 3

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### A. Entering data

Enter the following data into a spreadsheet.

| Sales Rep          | Employer Number | Product 1 | Product 2 | Product 3 |
|--------------------|-----------------|-----------|-----------|-----------|
| Maguire, Anthony   | 74              | 312       | 103       | 0         |
| Martin, Philip     | 26              | 231       | 83        | 0         |
| Jacobs, Peter      | 51              | 467       | 97        | 0         |
| Brady, Bill        | 89              | 209       | 67        | 0         |
| McKenna, Dennis    | 103             | 331       | 52        | 0         |
| O'Grady, Darren    | 52              | 288       | 31        | 0         |
| Reilly, Luke       | 60              | 211       | 76        | 0         |
| Fitzpatrick, James | 33              | 369       | 28        | 0         |
| Tate, Alan         | 95              | 455       | 84        | 0         |
| Product Totals     |                 |           |           |           |



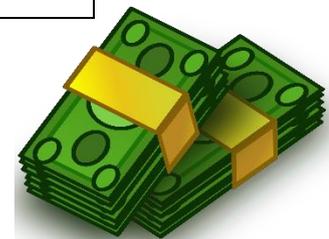
1. Adjust the columns to ensure that all text can be read. (Use 'Wrap text' if necessary)
2. Insert your name in the footer.
3. Save the spreadsheet as **Wages\_January**.
4. Sort the spreadsheet so that the sales rep names are in alphabetical order going from a to z.
5. Right-align the names of the sales reps.
6. Insert a column before the Sales Rep column and give it the heading Number.
7. Use numbers 1 to 9 in A2:A10.
8. Embolden and centre all headings.
9. Change the orientation to landscape.
10. Turn on gridlines and headings for printing purposes.
11. Save any changes.
12. Print the document. Exit the application.

## B. Using a formula

Open **Wages\_January**.

| Number | Sales Rep          | Employer Number | Product 1 | Product 2 | Product 3 |
|--------|--------------------|-----------------|-----------|-----------|-----------|
| 1      | Brady, Bill        | 89              | 209       | 67        | 0         |
| 2      | Fitzpatrick, James | 33              | 369       | 28        | 0         |
| 3      | Jacobs, Peter      | 51              | 467       | 97        | 0         |
| 4      | Maguire, Anthony   | 74              | 312       | 103       | 0         |
| 5      | Martin, Philip     | 26              | 231       | 83        | 0         |
| 6      | McKenna, Dennis    | 103             | 331       | 52        | 0         |
| 7      | O'Grady, Darren    | 52              | 288       | 31        | 0         |
| 8      | Reilly, Luke       | 60              | 211       | 76        | 0         |
| 9      | Tate, Alan         | 95              | 455       | 84        | 0         |
|        | Product Totals     |                 |           |           |           |

1. Save the document as **Wages\_January\_2**.
2. Use the SUM formula to add up Product 1.
3. Copy this formula across to add up Product 2.
4. Delete Column F.
5. Add a column heading **Rep totals** after Product 2.
6. Use a formula to work out the totals for Product 1 and Product 2 for each rep.
7. Add a Column heading **Commission** after Rep totals.
8. Use a formula to work out 8% of each rep's total.
9. Change the orientation to landscape.
10. Turn on gridlines and headings for printing purposes.
11. Save all changes. Print the document. Exit from the programme.



## C. Using a formula

Open **Wages\_January\_2**.



| Number | Sales Rep          | Employer Number | Product 1 | Product 2 | Rep totals | Commission |
|--------|--------------------|-----------------|-----------|-----------|------------|------------|
| 1      | Brady, Bill        | 89              | 209       | 67        | 276        | 22.08      |
| 2      | Fitzpatrick, James | 33              | 369       | 28        | 397        | 31.76      |
| 3      | Jacobs, Peter      | 51              | 467       | 97        | 564        | 45.12      |
| 4      | Maguire, Anthony   | 74              | 312       | 103       | 415        | 33.2       |
| 5      | Martin, Philip     | 26              | 231       | 83        | 314        | 25.12      |
| 6      | McKenna, Dennis    | 103             | 331       | 52        | 383        | 30.64      |
| 7      | O'Grady, Darren    | 52              | 288       | 31        | 319        | 25.52      |
| 8      | Reilly, Luke       | 60              | 211       | 76        | 287        | 22.96      |
| 9      | Tate, Alan         | 95              | 455       | 84        | 539        | 43.12      |
|        | Product Totals     |                 | 2418      | 537       |            |            |

1. Save the document as **Wages\_January\_3**.
2. Add a column heading **Salary** after **Commission**.
3. Create a formula in to work out the basic pay (€300) added to the commission. Copy the formula down.
4. After **Salary**, add a column heading **Tax**.
5. Use a formula to work out 20% of the wages. Copy the formula down.
6. Add a column heading **Net pay** after **Tax**.
7. Use a formula to work out the net pay by subtracting the tax from the salary. Copy the formula down.
8. Ensure that all headings are emboldened and centred.
9. Format all cells correctly, e.g. € to two decimal places; columns A and C are numbers.
10. Turn on gridlines and headings for printing purposes.
11. Save all changes. Print the document. Exit from the programme.

## D. Using more formulas

Open **Wages\_January\_3**.

| Number | Sales Rep          | Employer Number | Product 1 | Product 2 | Rep totals | Commission | Salary | Tax    | Net pay |
|--------|--------------------|-----------------|-----------|-----------|------------|------------|--------|--------|---------|
| 1      | Brady, Bill        | 89              | 209       | 67        | 276        | 22.08      | 322.08 | 64.416 | 257.664 |
| 2      | Fitzpatrick, James | 33              | 369       | 28        | 397        | 31.76      | 331.76 | 66.352 | 265.408 |
| 3      | Jacobs, Peter      | 51              | 467       | 97        | 564        | 45.12      | 345.12 | 69.024 | 276.096 |
| 4      | Maguire, Anthony   | 74              | 312       | 103       | 415        | 33.2       | 333.2  | 66.64  | 266.56  |
| 5      | Martin, Philip     | 26              | 231       | 83        | 314        | 25.12      | 325.12 | 65.024 | 260.096 |
| 6      | McKenna, Dennis    | 103             | 331       | 52        | 383        | 30.64      | 330.64 | 66.128 | 264.512 |
| 7      | O'Grady, Darren    | 52              | 288       | 31        | 319        | 25.52      | 325.52 | 65.104 | 260.416 |
| 8      | Reilly, Luke       | 60              | 211       | 76        | 287        | 22.96      | 322.96 | 64.592 | 258.368 |
| 9      | Tate, Alan         | 95              | 455       | 84        | 539        | 43.12      | 343.12 | 68.624 | 274.496 |
|        | Product Totals     |                 | 2418      | 537       |            |            |        |        |         |



1. Save the document as **Wages\_January\_4**.

2. Add a row heading **Average** under Product Totals.

3. Use a formula to work out the average of Product 1 and Product 2.

4. Add a row heading Minimum under Average.

5. Use a formula to work out the minimum for Product 1 and Product 2.

6. Add a row heading Maximum after Minimum.

7. Use a formula to work out the maximum for Product 1 and Product 2

8. Ensure that all text can be read.
9. Ensure that all column headings are emboldened and centred.
10. Change the orientation to landscape.
11. Turn on gridlines and headings for printing purposes.
12. Save all changes.
13. Print the document.
14. Exit from the programme.



## E. Completing the spreadsheet

Open **Wages\_January\_4**.

|    | A             | B                  | C                          | D                | E                | F                 | G                 | H             | I          | J              |
|----|---------------|--------------------|----------------------------|------------------|------------------|-------------------|-------------------|---------------|------------|----------------|
| 1  | <b>Number</b> | <b>Sales Rep</b>   | <b>Employer<br/>Number</b> | <b>Product 1</b> | <b>Product 2</b> | <b>Rep totals</b> | <b>Commission</b> | <b>Salary</b> | <b>Tax</b> | <b>Net pay</b> |
| 2  | 1             | Brady, Bill        | 89                         | 209              | 67               | 276               | 22.08             | 322.08        | 64.416     | 257.664        |
| 3  | 2             | Fitzpatrick, James | 33                         | 369              | 28               | 397               | 31.76             | 331.76        | 66.352     | 265.408        |
| 4  | 3             | Jacobs, Peter      | 51                         | 467              | 97               | 564               | 45.12             | 345.12        | 69.024     | 276.096        |
| 5  | 4             | Maguire, Anthony   | 74                         | 312              | 103              | 415               | 33.2              | 333.2         | 66.64      | 266.56         |
| 6  | 5             | Martin, Philip     | 26                         | 231              | 83               | 314               | 25.12             | 325.12        | 65.024     | 260.096        |
| 7  | 6             | McKenna, Dennis    | 103                        | 331              | 52               | 383               | 30.64             | 330.64        | 66.128     | 264.512        |
| 8  | 7             | O'Grady, Darren    | 52                         | 288              | 31               | 319               | 25.52             | 325.52        | 65.104     | 260.416        |
| 9  | 8             | Reilly, Luke       | 60                         | 211              | 76               | 287               | 22.96             | 322.96        | 64.592     | 258.368        |
| 10 | 9             | Tate, Alan         | 95                         | 455              | 84               | 539               | 43.12             | 343.12        | 68.624     | 274.496        |
| 11 |               | Product Totals     |                            | 2418             | 537              |                   |                   |               |            |                |
| 12 |               | Average            |                            | 302.25           | 67.125           |                   |                   |               |            |                |
| 13 |               | Minimum            |                            | 209              | 28               |                   |                   |               |            |                |
| 14 |               | Maximum            |                            | 467              | 103              |                   |                   |               |            |                |

2. Ensure that all text can be read.
3. Ensure all column headings are centred and emboldened.
4. Check that you have formatted all numbers from Product 1 to Net pay to currency, to two decimal places.

5. Insert a row at the top of the spreadsheet.
6. Add a heading **January 2016 Reps**. Merge and centre the heading.
7. Make the heading 14pt and bold.
8. Highlight the first two rows (Row 1 and 2) in 2 different colours.
9. Change the orientation to landscape.
10. Turn on gridlines and headings for printing purposes.
11. Ensure your name is in the footer.
12. Save as **Wages\_January\_5**.
13. Print the document. Ensure it fits on one page.
14. Exit the programme.



## Spreadsheet Project 4

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### A. Entering data

Enter the following data into a spreadsheet. *You do not have to type in the € or the zeros after the decimal points.*



| Item            | Price   | Delivery Charge | Ordered This Month |
|-----------------|---------|-----------------|--------------------|
| Bath Towels     | €6.95   | €5.00           | 319                |
| Bathroom Radio  | €24.95  | €8.00           | 150                |
| Bathroom Scales | €99.95  | €10.00          | 63                 |
| BBQ             | €199.95 | €20.00          | 38                 |
| Beach Towels    | €9.95   | €5.00           | 412                |
| Board Games     | €39.95  | €8.00           | 95                 |
| Book Ends       | €29.95  | €10.00          | 241                |
| Book Shelf      | €49.95  | €15.00          | 168                |
| Camera          | €69.95  | €10.00          | 112                |
| Card Games      | €14.95  | €5.00           | 243                |

1. Save the document as **Exercise\_1**.
2. Adjust the columns to ensure that all text can be read. (Use 'Wrap text' if necessary)
3. Insert a row at the top of the document. Give it a heading **Sales in November 2015**. Centre the heading across the spreadsheet.
4. Embolden the heading and make it 14pt.
5. Embolden and centre other headings.
6. Format the price and delivery charge to euro currency and two decimal points.
7. Change the orientation to landscape.
8. Turn on gridlines and headings for printing purposes.
9. Save **all changes**. Print the document.

## B. Using the SUM formula

### Open Exercise 1.

| Sales in November 2015 |         |                 |                    |
|------------------------|---------|-----------------|--------------------|
| Item                   | Price   | Delivery Charge | Ordered This Month |
| Bath Towels            | €6.95   | €5.00           | 319                |
| Bathroom Radio         | €24.95  | €8.00           | 150                |
| Bathroom Scales        | €99.95  | €10.00          | 63                 |
| BBQ                    | €199.95 | €20.00          | 38                 |
| Beach Towels           | €9.95   | €5.00           | 412                |
| Board Games            | €39.95  | €8.00           | 95                 |
| Book Ends              | €29.95  | €10.00          | 241                |
| Book Shelf             | €49.95  | €15.00          | 168                |
| Camera                 | €69.95  | €10.00          | 112                |
| Card Games             | €14.95  | €5.00           | 243                |



1. Save as **Exercise\_2**.
2. Insert your name in the footer.
3. Right align all the items in the first column.
4. Ensure that all numerical and currency data are right aligned.
5. Delete the row with the item 'Book Ends'.
6. Use the SUM formula to add up the prices.
7. Use the SUM formula to add up the delivery charges.
8. Use the SUM formula to add up total orders this month.
9. Add a 'Total' row heading for the totals.
10. Change the orientation to landscape.
11. Turn on gridlines and headings for printing purposes.
12. Save all changes.
13. Print the document.

## C. Using a formula

Open **Exercise\_2**.

| <b>Sales in November 2015</b> |              |                        |                           |
|-------------------------------|--------------|------------------------|---------------------------|
| <b>Item</b>                   | <b>Price</b> | <b>Delivery Charge</b> | <b>Ordered This Month</b> |
| Bath Towels                   | €6.95        | €5.00                  | 319                       |
| Bathroom Radio                | €24.95       | €8.00                  | 150                       |
| Bathroom Scales               | €99.95       | €10.00                 | 63                        |
| BBQ                           | €199.95      | €20.00                 | 38                        |
| Beach Towels                  | €9.95        | €5.00                  | 412                       |
| Board Games                   | €39.95       | €8.00                  | 95                        |
| Book Shelf                    | €49.95       | €15.00                 | 168                       |
| Camera                        | €69.95       | €10.00                 | 112                       |
| Card Games                    | €14.95       | €5.00                  | 243                       |
| Totals                        | €516.55      | €86.00                 | 1600                      |



1. Save as **Exercise\_3**.
2. Add a column heading 'Total' after 'Ordered this month'. Embolden and centre the heading.
3. Use a formula to work out the total for each item by adding the price and delivery charge and multiplying by the number ordered.
4. Copy the formula down the column to the last item.
5. Add a column heading 'Commission' after 'Total'. Embolden and centre the heading.
6. Use a formula to work out 8% commission on the totals.
7. Copy the formula down to the last item.
8. Ensure that all headings are emboldened and centred.
9. Change the orientation to landscape.
10. Turn on gridlines and headings for printing purposes.
11. Save all changes.
12. Print the document.

## D. Using a formula

### Open Exercise\_3.

| Sales in November 2015 |         |                 |                    |         |            |
|------------------------|---------|-----------------|--------------------|---------|------------|
| Item                   | Price   | Delivery Charge | Ordered This Month | Total   | Commission |
| Bath Towels            | €6.95   | €5.00           | 319                | 3812.05 | 304.964    |
| Bathroom Radio         | €24.95  | €8.00           | 150                | 4942.5  | 395.4      |
| Bathroom Scales        | €99.95  | €10.00          | 63                 | 6926.85 | 554.148    |
| BBQ                    | €199.95 | €20.00          | 38                 | 8358.1  | 668.648    |
| Beach Towels           | €9.95   | €5.00           | 412                | 6159.4  | 492.752    |
| Board Games            | €39.95  | €8.00           | 95                 | 4555.25 | 364.42     |
| Book Shelf             | €49.95  | €15.00          | 168                | 10911.6 | 872.928    |
| Camera                 | €69.95  | €10.00          | 112                | 8954.4  | 716.352    |
| Card Games             | €14.95  | €5.00           | 243                | 4847.85 | 387.828    |
| Totals                 | €516.55 | €86.00          | 1600               |         |            |

1. Save as **Exercise\_4**.
2. Add a column heading 'New Total' after the column 'Commission'.
3. Use a formula to work out the new total by subtracting the commission from the total.
4. Copy the formula down the column to the last item.
5. Copy the formula across for the 'Total' row so that all columns are totalled.
6. Format all numbers, except for the 'Ordered this month' numbers to currency, with 2 decimal points.
7. Ensure that all text can be read.
8. Ensure that all headings are emboldened and centred.
9. Change the orientation to landscape.
10. Turn on gridlines and headings for printing purposes.
11. Save all changes.
12. Print the document.



## E. Completing the spreadsheet

### Open Exercise\_4.

| Sales in November 2015 |         |                 |                    |            |            |            |
|------------------------|---------|-----------------|--------------------|------------|------------|------------|
| Item                   | Price   | Delivery Charge | Ordered This Month | Total      | Commission | New Total  |
| Bath Towels            | €6.95   | €5.00           | 319                | €3,812.05  | €304.96    | €3,507.09  |
| Bathroom Radio         | €24.95  | €8.00           | 150                | €4,942.50  | €395.40    | €4,547.10  |
| Bathroom Scales        | €99.95  | €10.00          | 63                 | €6,926.85  | €554.15    | €6,372.70  |
| BBQ                    | €199.95 | €20.00          | 38                 | €8,358.10  | €668.65    | €7,689.45  |
| Beach Towels           | €9.95   | €5.00           | 412                | €6,159.40  | €492.75    | €5,666.65  |
| Board Games            | €39.95  | €8.00           | 95                 | €4,555.25  | €364.42    | €4,190.83  |
| Book Shelf             | €49.95  | €15.00          | 168                | €10,911.60 | €872.93    | €10,038.67 |
| Camera                 | €69.95  | €10.00          | 112                | €8,954.40  | €716.35    | €8,238.05  |
| Card Games             | €14.95  | €5.00           | 243                | €4,847.85  | €387.83    | €4,460.02  |
| Totals                 | €516.55 | €86.00          | 1600               | €59,468.00 | €4,757.44  | €54,710.56 |

1. Save as **Exercise\_5**.
2. Add a row heading after 'Totals' and use the heading 'Average'
3. Use a formula to work out the average price.
4. Copy the formula across to work out the averages of all the columns.
5. Add a row heading after 'Average' and use the heading 'Minimum'.
6. Use a formula to work out the 'Minimum' price.
7. Copy the formula across to work out the minimum for all the columns.
8. Add a row heading after 'Minimum' and use the heading 'Maximum'.
9. Copy the formula across to work out the maximum of all the columns.
10. Ensure all currency is in euro and two decimal points.
11. Ensure that all headings are emboldened and centred.
12. Change the orientation to landscape.
13. Add shading, colours etc. to enhance your document.
14. Ensure your name is in the footer.
15. Save all changes. Print the document, ensuring it fits on one page.

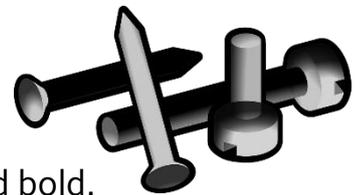


# Spreadsheet Project 5

## Task 1: Setting up a spreadsheet

The management of **The Hardware Shop** has decided to produce sales reports for various departments. This will allow them to have immediate access to accurate and up-to-date information on sales trends and to adjust their stock in line with these trends.

- (a) Open the spreadsheet software.
- (b) Set up the spreadsheet with the headings shown, and input the data as shown below.
- (c) Column widths should be adjusted to fit the data.
- (d) Main and column headings should be centrally aligned and bold.



| Sales Report for present stock items |                 |                 |             |        |          |              |
|--------------------------------------|-----------------|-----------------|-------------|--------|----------|--------------|
| Prod Code                            | Description     | Production cost | Sales price | Profit | Quantity | Total profit |
| 234                                  | Pack of nails   | €1.39           |             |        | 273      |              |
| 344                                  | Adhesive tape   | €4.99           |             |        | 89       |              |
| 423                                  | Masking tape    | €2.99           |             |        | 352      |              |
| 212                                  | Super glue      | €2.58           |             |        | 271      |              |
| 233                                  | Hammer          | €9.55           |             |        | 158      |              |
| 132                                  | Paint brush set | €11.49          |             |        | 274      |              |
| 323                                  | Thinners        | €1.79           |             |        | 362      |              |
| 421                                  | Hinge set       | €6.95           |             |        | 102      |              |
| 456                                  | Screwdrivers    | €8.69           |             |        | 73       |              |
| 562                                  | Pack of bolts   | €3.35           |             |        | 52       |              |
|                                      |                 |                 |             |        | Total:   |              |
|                                      |                 |                 |             |        | Average: |              |

- (e) Change the **Production cost** for Screwdrivers to **€9.25**
- (f) Change the **Description** for **Product Code 234** to **Box of nails**.
- (g) Save the spreadsheet as **Hardware\_Shop**.
- (h) Print the spreadsheet, using landscape orientation and gridlines.



## Task 2: Using formulas

- Use a formula to calculate the **Sales Price**, for each item, as 1.55 times the **Production Cost** and display in currency format with two decimal places.
- Use a formula to calculate the **Profit**, for each item, as the **Sales Price** minus the **Production Cost**.
- Work out the **Total Profit** for each item by multiplying the profit by the quantity sold.
- Use the SUM function to calculate the **Total** for the **Total Profit** column and display in currency format, in the appropriate position, with two decimal places.
- Use the Average function to calculate the **Average** for the **Total Profit** column and display in currency format, in the appropriate position, with two decimal places.
- Format the columns **Production cost, Sales price, Profit and Total profit** to currency.
- Enhance the document, using colour, shading, borders, etc.
- Save the spreadsheet as **Hardware\_Shop\_2**.
- Print one copy of the spreadsheet, ensuring orientation is landscape and gridlines are on.

## Task 3: Amending an existing spreadsheet

- Open the spreadsheet **Monthly\_Wages** that you can download from the website.
- Save the spreadsheet as **Monthly\_Wages**.
- Delete the row with sales rep C. Martin.
- Insert a row under the Sales Rep **T. Jacobs**.
- Insert the following information:



| Sales Rep   | Number | Product 1 | Product 2 | Product 3 |
|-------------|--------|-----------|-----------|-----------|
| K. McDonald | 8      | €265      | €245      | €469      |

- (f) Calculate the **Rep totals, Commission, Salary, Tax and Net Pay** on the same basis as for the other reps.
- (g) Delete the column **Number**.
- (h) Change the **Minimum** to **Maximum** and recalculate for Product 1 and 2.
- (i) **Add the 3 products** for **Outside reps**.
- (j) Divide this new total by 9 to get the average totals for the Outside reps.
- (k) Save the spreadsheet as **Monthly\_Wages**.
- (l) Print one copy of the spreadsheet, ensuring orientation is landscape and gridlines are on.

#### Task 4: Completing the spreadsheet

- (a) Adjust the row height for **Product Totals** to **17**.
- (b) Adjust the column width for **Net Pay** to **9**.
- (c) Right align all items in the **Sales rep** column.
- (d) Ensure all labels are bold and centred.
- (e) Ensure the overall heading **Sales Report for present stock items** is bold and centred across the spreadsheet.
- (f) Save all changes.
- (g) Print one copy of the spreadsheet, ensuring it fits on one page.
- (h) Exit the application.



## Spreadsheet Project 6

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The management of Durkan's department store has decided to produce sales reports for various departments.

### Task 1: Setting up the spreadsheet

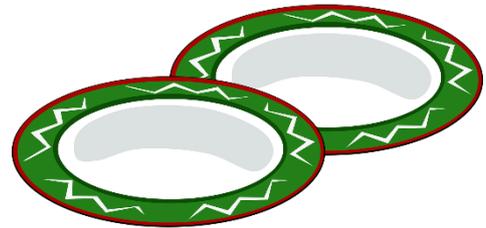
- Set up the spreadsheet with the headings shown, and input the data as shown below.
- Column widths should be adjusted to fit the data.
- Main and column headings should be centrally aligned.
- Numeric and currency data should be right aligned.
- Side headings (Total:, Average) should be right aligned.
- Save the spreadsheet as **Report**.



| Sales Report for present stock items |                |            |       |          |        |
|--------------------------------------|----------------|------------|-------|----------|--------|
|                                      |                | Production | Sales |          |        |
| Prod Code                            | Description    | Cost/item  | Price | Quantity | Profit |
| 12587                                | Cup – 20cl     | €1.25      |       | 400      |        |
| 13578                                | Mug – 25cl     | €1.55      |       | 250      |        |
| 14875                                | Saucer – 150mm | €1.05      |       | 1800     |        |
| 14935                                | Plate 200mm    | €1.05      |       | 1025     |        |
| 15247                                | Small Bowl     | €1.15      |       | 2860     |        |
| 15795                                | Plate 250mm    | €1.15      |       | 750      |        |
| 17642                                | Jug – 1 litre  | €2.15      |       | 1950     |        |
| 18564                                | Mug – 30cl     | €1.85      |       | 4500     |        |
| 19547                                | Large Bowl     | €2.25      |       | 2540     |        |
| 20478                                | Plate 300mm    | €1.60      |       | 1500     |        |
|                                      |                |            |       | Total:   |        |
|                                      |                |            |       | Average: |        |

## Task 2: Using formulas

- Use a formula to calculate the **Sales Price**, for each item, as 1.85 times the **Production Cost / item** and display in currency format with two decimal places. Copy the formula down.
- Use a formula to calculate the **Profit**, for each item, as the **Sales Price** minus the **Production Cost / item** multiplied by the **Quantity**. Copy the formula down.
- Use the SUM function to calculate the **Total** for the **Profit** column and display in currency format, in the appropriate position, with two decimal places.
- Use the AVG (AVERAGE) function to calculate the **Average** for the **Profit** column and display in currency format, in the appropriate position, with two decimal places.
- Save the spreadsheet as **Report\_1**.
- Print one copy of the spreadsheet.



## Task 3: Completing the spreadsheet

- Delete the rows with **Prod Codes** 13578 and 15795.
- Insert two extra rows at the bottom of the list of products.
- Add the following products to the spreadsheet:

|       |             |       |       |      |       |
|-------|-------------|-------|-------|------|-------|
| 16203 | Vase        | €1.25 | ----- | 5874 | ----- |
| 18204 | Medium Bowl | €3.50 | ----- | 1845 | ----- |

- Calculate the **Sales Price** and **Profit** for these items on the same basis as for the other items.
- Recalculate the **Total:** and **Average:** values to take account of these deletions and insertions.
- Sort the spreadsheet so that all the products are in ascending order by **Prod Code**, without disturbing the layout of the spreadsheet.
- Format cells correctly, e.g. currency for prices.
- Enhance the spreadsheet with borders, colour and shading.
- Save the spreadsheet as **Report\_2**.
- Print one copy of the spreadsheet.



# Spreadsheet Project 7

## Task 1: Setting up the spreadsheet

The management of **The Pet**

**Shop** has produced sale reports.



- Open the spreadsheet software.
- Set up the spreadsheet with the headings shown, and input the data as shown below.
- Column widths should be adjusted to fit the data.

| Sales Report for present stock items |             |                 |             |        |          |              |
|--------------------------------------|-------------|-----------------|-------------|--------|----------|--------------|
| Prod Code                            | Description | Production cost | Sales price | Profit | Quantity | Total profit |
| 23                                   | Dog food    | €0.99           |             |        | 134      |              |
| 28                                   | Cat food    | €0.99           |             |        | 76       |              |
| 19                                   | Dog collar  | €3.99           |             |        | 159      |              |
| 54                                   | Cat collar  | €3.49           |             |        | 354      |              |
| 21                                   | Food bowl   | €1.20           |             |        | 341      |              |
| 98                                   | Water bowl  | €1.20           |             |        | 562      |              |
| 76                                   | Dog treats  | €0.95           |             |        | 164      |              |
| 62                                   | Cat treats  | €0.90           |             |        | 86       |              |
| 38                                   | Cat basket  | €5.90           |             |        | 103      |              |
| 59                                   | Dog blanket | €6.19           |             |        | 32       |              |
|                                      |             |                 |             |        | Total:   |              |
|                                      |             |                 |             |        | Average: |              |

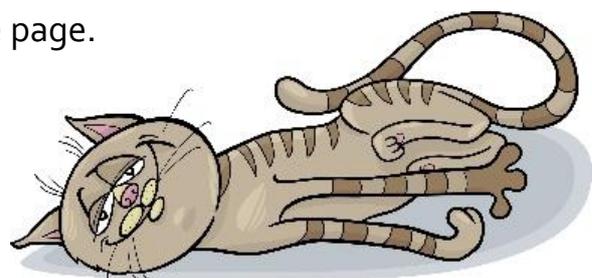


- d) Put your name in the header.
- e) Save the spreadsheet as **Pet\_Shop**.
- f) Print the spreadsheet, using landscape orientation and gridlines.
- g) Change the **Production cost** for Dog treats from €0.95 to **€1.25**.

- h) Change the **Description** for **Product Code 59** from Dog blanket to **Dog basket**.
- i) Main and column headings should be centrally aligned and bold.
- j) Save the spreadsheet as **Pet\_Shop\_1**.
- k) Print the spreadsheet, using landscape orientation and gridlines.

## Task 2: Using formulas

- a) Use a formula to calculate the **Sales Price**, for each item, as 1.63 times the **Production Cost** and display in currency format with two decimal places.
- b) Use a formula to calculate the **Profit**, for each item, as the **Sales Price** minus the **Production Cost**.
- c) Work out the **Total Profit** for each item by multiplying the profit by the quantity sold.
- d) Use the SUM function to calculate the **Total** for the **Total Profit** column and display in currency format, in the appropriate position, with two decimal places.
- e) Use the Average function to calculate the **Average** for the **Total Profit** column and display in currency format, in the appropriate position, with two decimal places.
- f) Format the columns **Production cost**, **Sales price**, **Profit** and **Total profit** to currency.
- g) Enhance the spreadsheet with border, colour, etc.
- h) Save the spreadsheet as **Pet\_Shop\_2**.
- i) Print one copy of the spreadsheet, ensuring orientation is landscape and gridlines are on. Ensure it fits on one page.



### Task 3: Amending an existing spreadsheet

- Open the spreadsheet **February\_Salary** that you downloaded from the website.
- Save the spreadsheet as **Wage\_1**.
- Delete the row Number 5 (Colm Henry).
- Insert a row under the Sales Rep **Paul Finnegan**.
- Insert the following information:

| Number | Sales Rep    | Employer Number | Product 1 | Product 2 |
|--------|--------------|-----------------|-----------|-----------|
| 9      | Doyle, Chris | 12389           | €302      | €268      |

- Calculate the **Rep totals, Commission, Salary, Tax and Net Pay** on the same basis as for the other reps.
- Delete the column **Number**.
- Change the **Maximum** to **Minimum** and recalculate for Product 1 and 2.
- In F16, **add** the **Total 1** and **Total 2** for **Outside reps**.
- In G16, divide this new total by 10 to get the average totals for the Outside reps.
- Put your name in the header.
- Save the spreadsheet as **Wage\_2**.
- Print one copy of the spreadsheet, ensuring orientation is landscape and gridlines are on. Ensure it fits on one page.



### Task 4: Completing the spreadsheet

- Adjust the row height for **Product Totals** to **19**.
- Adjust the column width for **Tax** to **11**.
- Right align all items in the **Sales rep** column.
- Ensure all column labels are bold and centred.
- Ensure the overall heading **Wages** is bold and centred across the spreadsheet.
- Save the spreadsheet as **Wage\_3**. Print one copy of the spreadsheet.

# Spreadsheet Project 8

## Task 1: Setting up the spreadsheet

The management of **The Instrument**

**Shop** has decided to produce sales reports for various departments.



- Open the spreadsheet software.
- Set up the spreadsheet with the headings shown, and input the data as shown below.
- Column widths should be adjusted to fit the data.

| Sales Report for present stock items |                   |                 |             |        |          |              |
|--------------------------------------|-------------------|-----------------|-------------|--------|----------|--------------|
| Prod Code                            | Description       | Production cost | Sales price | Profit | Quantity | Total profit |
| 234                                  | Bass guitar       | €670            |             |        | 7        |              |
| 344                                  | Violin            | €650            |             |        | 10       |              |
| 423                                  | Piano             | €2300           |             |        | 3        |              |
| 212                                  | Flute             | €150            |             |        | 9        |              |
| 233                                  | Drum set          | €1340           |             |        | 4        |              |
| 132                                  | Trumpet           | €410            |             |        | 5        |              |
| 323                                  | Harp              | €980            |             |        | 2        |              |
| 421                                  | French horn       | €2400           |             |        | 1        |              |
| 456                                  | Double bass       | €9134           |             |        | 3        |              |
| 562                                  | Bosendorfer piano | €179000         |             |        | 2        |              |
|                                      |                   |                 |             |        | Total:   |              |
|                                      |                   |                 |             |        | Average: |              |



- d) Main and column headings should be centrally aligned and bold.
- e) Change orientation to landscape and put on gridlines for printing and headings.
- f) Place your name in the header.
- g) Save the spreadsheet as **Instruments**.
- h) Print the spreadsheet.
- i) Change the **Production cost** for violins to €865
- j) Change the **Description** for **Product Code 132** to **Trombone**.
- k) Save the spreadsheet as **Instruments\_1**
- l) Print the spreadsheet, using landscape orientation and gridlines for printing and headings.

## Task 2: Using formulas

- a) Use a formula to calculate the **Sales Price**, for each item, as 2.25 times the **Production Cost** and display in currency format with two decimal places.
- b) Use a formula to calculate the **Profit**, for each item, as the **Sales Price** minus the **Production Cost**.
- c) Work out the **Total Profit** for each item by multiplying the profit by the quantity sold.
- d) Use the SUM function to calculate the **Total** for the **Total Profit** column and display in currency format, in the appropriate position, with two decimal places.
- e) Use the Average function to calculate the **Average** for the **Total Profit** column and display in currency format, in the appropriate position, with two decimal places.
- f) Ensure the columns **Production cost**, **Sales price**, **Profit** and **Total profit** are formatted to currency.
- g) Save the spreadsheet as **Instruments\_2**.
- h) Print one copy of the spreadsheet, ensuring orientation is landscape and gridlines are on for printing and headings.



### Task 3: Opening an existing spreadsheet

- a) Open the spreadsheet **Salary\_May** that is provided on the memory key.
- b) Save the spreadsheet as **Salary\_May**.
- c) Delete the row Number 8 (Richard Wagner).
- d) Insert a row under the Sales Rep **Joseph Haydn**.
- e) Insert the following information:

| Number | Sales Rep   | Employer Number | Product 1 |  | Product 2 |
|--------|-------------|-----------------|-----------|--|-----------|
| 9      | Franz Liszt | 962             | €901      |  | €857      |

- f) Calculate the **Rep totals, Commission, Salary, Tax and Net Pay** on the same basis as for the other reps.
- g) Delete the column **Number**.
- h) Change the **Minimum** to **Maximum** and recalculate for Product 1 and 2.
- i) In E16, **add** the **Total 1** and **Total 2** for **Outside reps**.
- j) In F16, divide this new total by 7 to get the average totals for the Outside reps.
- k) Save the spreadsheet as **Salary\_May\_1**.
- l) Put your name in the header.
- m) Print one copy of the spreadsheet, ensuring orientation is landscape and gridlines are on for printing and headings. Ensure it fits on one page.

### Task 4: Completing the spreadsheet



- a) Adjust the row height for **Outside Reps** to **21**.
- b) Adjust the column width for **Net Pay** to **15**.
- c) Right align all items in the **Sales rep** column.
- d) Ensure all labels are bold and centred.
- e) Ensure the overall heading **Salary May** is bold and centred across the spreadsheet.
- f) Save the spreadsheet as **Salary\_May\_2**.
- g) Print one copy of the spreadsheet.

## Spreadsheet Project 9

The management of Stan's Stationery has decided to produce sales reports for various departments.



### Task 1: Setting up the spreadsheet

- Set up the spreadsheet with the headings shown, and input the data as shown below.
- Column widths should be adjusted to fit the data.
- Main and column headings should be centrally aligned and bold.
- Numeric and currency data should be right aligned.
- Save as **Sales**.

| Sales Report for present stock items |                 |                 |             |        |          |              |
|--------------------------------------|-----------------|-----------------|-------------|--------|----------|--------------|
| Prod Code                            | Description     | Production cost | Sales price | Profit | Quantity | Total profit |
| 15674                                | A4 notepads     | €0.99           |             |        | 3421     |              |
| 15934                                | Glue            | €1.19           |             |        | 2738     |              |
| 15231                                | Large files     | €1.10           |             |        | 1093     |              |
| 15900                                | Ruler           | €0.32           |             |        | 3782     |              |
| 15233                                | Envelopes       | €1.03           |             |        | 4832     |              |
| 14896                                | Stapler         | €4.50           |             |        | 854      |              |
| 14893                                | Paper ream      | €1.12           |             |        | 4790     |              |
| 15673                                | Highlighters    | €1.35           |             |        | 1743     |              |
| 15022                                | Pens – Box (25) | €14.99          |             |        | 2067     |              |
| 16129                                | Pencils (25)    | €12.16          |             |        | 2786     |              |
|                                      |                 |                 |             |        | Total:   |              |
|                                      |                 |                 |             |        | Average: |              |

## Task 2: Using formulas

- Use formula to calculate the **Sales Price**, for each item, as 1.95 times the **Production Cost** and display in currency format with two decimal places.
- Use formula to calculate the **Profit**, for each item, as the **Sales Price** minus the **Production Cost**.
- Work out the Total Profit by multiplying the profit by the quantity sold. Copy the formula down.
- Use the SUM function to calculate the **Total** for the **Total Profit** column and display in currency format, in the appropriate position, with two decimal places.
- Use the Average function to calculate the **Average** for the **Total Profit** column and display in currency format, in the appropriate position, with two decimal places.
- Save the spreadsheet as **Sales\_1**.
- Print one copy of the spreadsheet.

## Task 3: Amending the spreadsheet

- Delete the rows with **Prod Codes** 16129 and 15934.
- Insert two extra rows at the bottom of the list of products.
- Add the following products to the spreadsheet:

|       |         |       |  |  |      |  |
|-------|---------|-------|--|--|------|--|
| 16321 | Erasers | €0.99 |  |  | 2543 |  |
| 15552 | Folders | €1.29 |  |  | 1922 |  |

- Calculate the **Sales Price** and **Profit** for these items on the same basis as for the other items.
- Recalculate the **Total:** and **Average:** values to take account of these deletions and insertions.
- Sort the spreadsheet so that all the products are in ascending order by **Prod Code**, without disturbing the layout of the spreadsheet.
- Save the spreadsheet as **Sales\_2**.
- Print one copy of the spreadsheet, ensuring it fits on one page.



## Task 4: Completing the spreadsheet

- Change the formula to work out the sales price as 1.65 times the production cost.
- Copy this formula down.
- Enhance the spreadsheet with borders, colour, shading, etc.
- Save the spreadsheet as **Sales\_3**.
- Print one copy of the spreadsheet.

## Spreadsheet Project 10

---

There are many instructions to follow! Keep your wits about you.....

Type in the following spreadsheet.

|   | A                   | B         | C         | D         | E                |
|---|---------------------|-----------|-----------|-----------|------------------|
| 1 | Sales for the month |           |           |           |                  |
| 2 | Sales Rep           | Product 1 | Product 2 | Product 3 | Sales Rep Totals |
| 3 | A. Rhodes           | 443       | 215       | 1036      |                  |
| 4 | C. Martin           | 192       | 376       | 1680      |                  |
| 5 | M. Daler            | 325       | 455       | 955       |                  |
| 6 | R. Hoskins          | 344       | 210       | 704       |                  |
| 7 | J. Trent            | 350       | 370       | 2167      |                  |
| 8 | P. McTee            | 235       | 156       | 1173      |                  |
| 9 | Totals              |           |           |           |                  |



1. Adjust columns so that all text can be read.
2. Save the spreadsheet as **Sales\_Reps**.
3. Sort the spreadsheet so the Sales reps are in alphabetical order going from z to a.
4. Insert a column between **Sales Rep** and **Product 1** and give it the heading **Number**.
5. Use numbers 1 to 6 in **B3** to **B8**.
6. Create a formula in **F3** to display the total for

Product 1, 2 and 3.

7. Copy the formula from **F4** to **F8**.
8. Type the heading **Product Totals** in **A9**.
9. Create a formula in **C9** to add the products from **C3** to **C8**.
10. Copy this formula across to **D9** and **E9**.

11. Add a column heading **Commission** in **G2**.
12. Create a formula in **G3** to work out 10% of the total in **F3**.
13. Copy the formula down to **G8**.
14. Add a column heading **Salary** in **H2**.
15. Create a formula in **H3** to work out the basic pay (€300) added to the commission.
16. Copy this formula to **H8**.
17. Add a heading total **Tax** in **I2**.
18. Create a formula in **I3** to work out 20% tax on the salary.
19. Copy this formula to **I8**.



20. Delete Row 10.
21. In **A10** type in a heading **Average Sales**.
22. In **C10** create a formula to work out the average product cost from **C3** to **C8**.
23. Copy this formula to **D10** and **E10**.
24. In **A11** type in the heading **Minimum**.
25. In **C11** create a formula to work out

the minimum amount for **C3** to **C8**.

26. Copy this formula to **D11** and **E11**.
27. In **J2** type in a heading **Net pay**.
28. In **J3** create a formula to work out the net pay by subtracting the tax from the salary.
29. Copy the formula to **J8**.
30. Change the heading in **A11** to **Maximum**.
31. Change the formula in **C11** to work out the maximum amounts for **C3** to **C8**.

32. Copy this formula to **D11** and **E11**.
33. Format all numbers from Column C as currency, correct to two decimal places.
34. Centre and merge the spreadsheet heading 'Sales for the Month' across the spreadsheet.
35. Change the heading to size 14 and make it bold.
36. Embolden and centre all headings in Row 2.
37. Change the page orientation to LANDSCAPE.
38. Enhance the spreadsheet using colour, shading etc.
39. Turn on gridlines and headings for printing purposes.
40. Put your name in the footer.
41. Save the document as **Sales\_Reps\_2**.
42. Print the document, ensuring it fits on one page.



## Spreadsheet Project 11

Create a spreadsheet using the following information. You have been asked to prepare a spreadsheet using the results of a survey on the types of fruit juices people prefer. 3000 people were asked what their favourite fruit juice is, and what their next preference would be if their favourite was not available.

1. Enter the raw data below, applying as many presentation Features (Font, Font Size, Font Colour, Number Formats and Colour, Cell Shading, etc) to it as you wish.
2. Save as **Juice\_Survey**.
3. Apply appropriate number formats to your numbers.
4. Centre your spreadsheet horizontally on the page
5. Give your spreadsheet an appropriate title and centre it across your spreadsheet.
6. Select Landscape orientation for your spreadsheet.
7. Adjust the column width and row height to suit the layout you have selected.
8. Create formulas to calculate the percentage of the total number of people surveyed that preferred a specific fruit juice as their first preference.
9. Create formulas to calculate the percentage of the total number of people surveyed that preferred a specific fruit juice as their second preference.
10. Setup an appropriate header for this spreadsheet.
11. Setup a page number for this spreadsheet and place it in the footer.
12. Save all changes and print.

| Juice      | 1st Preference | 2nd Preference |
|------------|----------------|----------------|
| Orange     | 342            | 403            |
| Apple      | 359            | 367            |
| Cranberry  | 238            | 290            |
| Blueberry  | 215            | 190            |
| Tropical   | 321            | 311            |
| Mango      | 103            | 80             |
| Pear       | 180            | 380            |
| Tomato     | 217            | 120            |
| Grapefruit | 215            | 105            |
| Grape      | 425            | 414            |



## Spreadsheet Project 12

Create a spreadsheet using the following information. You have been asked to prepare a spreadsheet to show the profit and loss figure for the last financial year. The profit and loss should be shown as euro and as a percentage.

1. Enter the raw data below, applying as many presentation features (Font, Font Size, Font Colour, Number Formats and Colour, Cell Shading, etc) to it as you wish.
2. Save as **Profit\_Loss**.
3. Apply appropriate number formats to your numbers.
4. Give your spreadsheet an appropriate title and centre it across your spreadsheet.
5. Select the Landscape orientation for your spreadsheet.
6. Adjust the column width and row height to suit the layout you have selected.
7. Create formulas to calculate the profit / loss as a currency for each month.
8. Create formulas to calculate the profit / loss as a percentage for each month.
9. Create formulas to calculate the Annual Totals for the Income, expenditure, and profit / loss.
10. Format all numbers appropriately and to two decimal places.
11. Enhance your spreadsheet and save all changes.
12. Switch on gridlines for printing and print one copy of the spreadsheet.
13. Exit the application.

| Month     | Income  | Expenditure |
|-----------|---------|-------------|
| March     | 1259.9  | 1410.45     |
| April     | 1163.98 | 1499.10     |
| May       | 1533    | 1370.25     |
| June      | 1774    | 1440.8      |
| July      | 1631    | 1530.25     |
| August    | 1658    | 1490.55     |
| September | 1781    | 1369        |
| October   | 1821.54 | 1420        |
| November  | 2233.82 | 1611.81     |
| December  | 2537.22 | 1577.63     |
| January   | 1650    | 1423.98     |
| February  | 1623    | 1598.12     |



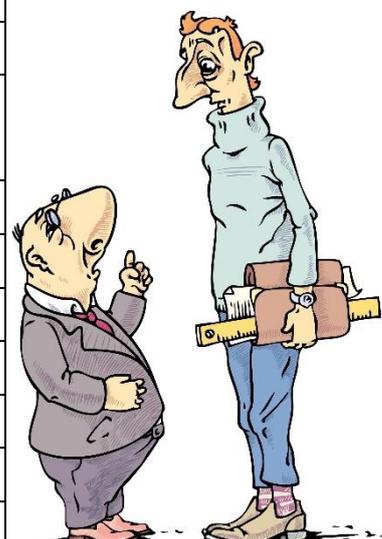
## Spreadsheet Project 13

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There are lots of instructions!

Type in the following spreadsheet.

| Sales Rep          | Employer Number | Product 1 | Product 2 | Product 3 |
|--------------------|-----------------|-----------|-----------|-----------|
| O'Brien, James     | 12843           | 435       | 123       | 0         |
| McKenzie, Brian    | 13723           | 546       | 98        | 0         |
| Donohoe, Michael   | 15632           | 213       | 135       | 0         |
| Mills, Christopher | 19821           | 657       | 56        | 0         |
| McKiernan, Tom     | 14589           | 309       | 184       | 0         |
| Duff, Mark         | 20831           | 412       | 205       | 0         |
| Strutt, Brendan    | 18347           | 743       | 57        | 0         |
| Fitzgerald, Gerry  | 10328           | 498       | 138       | 0         |
| Greene, Keith      | 16293           | 265       | 209       | 0         |
| Product Totals     |                 |           |           |           |



1. Adjust columns so that all text can be read.
2. Insert your name in the footer, on the right hand side. Include the current date and the time.
3. Save the spreadsheet as **Wages\_2**.
4. Sort the spreadsheet so that the sales rep names are in alphabetical order going from **a to z**.
5. **Right-align** the names of the sales reps.
6. Insert a column before the Sales Rep column and give it the heading **Number**.
7. Use numbers 1 to 9 in **A2:A10**.

8. Create a formula in **D11** to calculate the totals for Product 1.
9. Copy the formula to **E11**.
10. Type the heading **Rep Totals** in **G1**.
11. Create a formula in **G2** to work out the rep's total by adding Product 1 and Product 2.
12. Copy this formula from **G3:G10**.



13. Delete column F.
14. Add a column heading **Commission** in **G1**.
15. Create a formula in **G2** to work out 10% of the total in **F2**.
16. Copy the formula from **G3:G10**.
17. Add a column heading **Salary** in **H1**.
18. Create a formula in **H2** to work out the basic pay (€500) added to the

commission.

19. Copy this formula from **H3:H10**.
20. Add a heading total **Tax** in **I1**.
21. Create a formula in **I2** to work out 20% tax on the salary.
22. Copy this formula from **I3:I10**.
23. Delete Row 10.
24. In **J1**, type in the heading **Net Pay**.
25. In **J2** create a formula to work out the **Net Pay** by subtracting the tax from the salary.
26. Copy this formula from **J3:J9**.

27. Change the formula in **G2** to work out **9%** commission on the reps total sales.
28. Copy this formula from **G3:G9**.
29. In **B12** type in a heading **Average Sales**.
30. In **D12** create a formula to work out the average product cost from **D2** to **D9**.
31. Copy this formula to **E12**.
32. In **B13** type in the heading **Minimum**.
33. In **D13** create a formula to work out the minimum amount for **D2:D9**.
34. Copy this formula to **E13**.
35. Format all numbers from **D2:J13** as currency, correct to two decimal places.
36. Insert a row at the top of the spreadsheet and give it the heading **Wages**.
37. Centre and merge the spreadsheet heading 'Wages' across the spreadsheet.
38. Change the heading to size 14 and make it bold.
39. Embolden and centre all headings in **Row 2**.
40. Change the page orientation to **LANDSCAPE**.
41. Save the document as **Wages\_3**.
42. Print the document.
43. Shade in Row 1 and 2 using the same colour.
44. Change **C3** to **20632**.
45. Change **E8** to **104**.
46. Change **B14** to **Maximum**.
47. Change the formula in **D14** to work out the maximum amount for **D3:D10**.
48. Copy the formula across to **E14**.
49. Shade in the averages (**B13:E13**) and maximum (**B14:E14**) in two different shades.

50. Rename Sheet 1 and call it **Wages**.
51. Copy and paste the Reps Names into **A1** onto Sheet 2 and call the worksheet **Reps**. Adjust the column so all text can be read.
52. Turn on gridlines and headings for printing purposes.
53. Do a spell check on the document.
54. Proofread the document.
55. Save the document as **Wages\_4**.
56. Print the document. (Sheet 1 and Sheet 2)

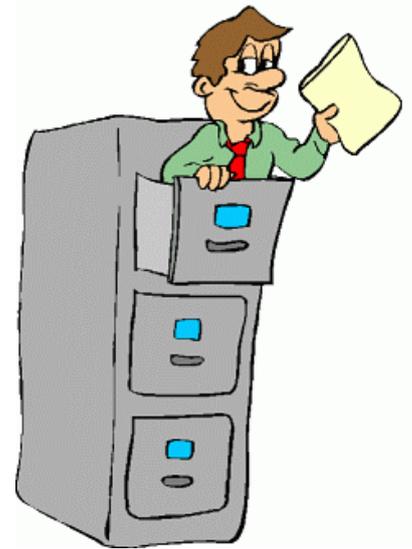


## Spreadsheet Project 14

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Type in the following spreadsheet.

| Sales Rep         | Employer Number | Product 1 | Product 2 | Product 3 |
|-------------------|-----------------|-----------|-----------|-----------|
| O'Sullivan, Kevin | 342             | 365       | 259       | 0         |
| Tierney, Sinead   | 765             | 521       | 345       | 0         |
| O'Keefe, Patrick  | 108             | 409       | 378       | 0         |
| Boylan, Trevor    | 449             | 378       | 299       | 0         |
| Kenny, Pat        | 287             | 499       | 315       | 0         |
| Fitzpatrick, Ann  | 1023            | 276       | 432       | 0         |
| Byrne, Edward     | 453             | 590       | 420       | 0         |
| Cullen, Mark      | 195             | 362       | 264       | 0         |
| Rourke, Michael   | 639             | 419       | 391       | 0         |
| Product Totals    |                 |           |           |           |



- 1) Adjust columns so that all text can be read.
- 2) Insert your name in the footer, on the right hand side. Include the current date and the time.
- 3) Save the spreadsheet as **Salary**.
- 4) Sort the spreadsheet so that the sales rep names are in alphabetical order going from **a to z**.
- 5) **Right-align** the names of the sales reps.
- 6) Insert a column before the Sales Rep column and give it the heading **Number**.
- 7) Use numbers 1 to 9 in **A2:A10**.
- 8) Create a formula in **D11** to calculate the totals for Product 1.
- 9) Copy the formula to **E11**.
- 10) Type the heading **Rep Totals** in **G1**.
- 11) Create a formula in **G2** to work out each rep's total by adding Product 1 and

Product 2.

12) Copy this formula from **G3:G10**.

13) Delete column F.

14) Add a column heading **Commission** in **G1**.

15) Create a formula in **G2** to work out 10% of the total in **F2**.

16) Copy the formula from **G3:G10**.

17) Add a column heading **Salary** in **H1**.

18) Create a formula in **H2** to work out the basic pay (€500) added to the commission.

19) Copy this formula from **H3:H10**.

20) Add a heading total **Tax** in **I1**.

21) Create a formula in **I2** to work out 20% tax on the salary.

22) Copy this formula from **I3:I10**.

23) Delete Row 10.

24) In **J1**, type in the heading **Net Pay**.

25) In **J2** create a formula to work out the **Net Pay** by subtracting the tax from the salary.

26) Copy this formula from **J3:J9**.

27) Change the formula in **G2** to work out **9%** commission on the reps total sales.

28) Copy this formula from **G3:G9**.

29) In **B12** type in a heading **Average Sales**.

30) In **D12** create a formula to work out the average product cost from **D2** to **D9**.

31) Copy this formula to **E12**.

32) In **B13** type in the heading **Minimum**.

33) In **D13** create a formula to work out the minimum amount for **D2:D9**.

34) Copy this formula to **E13**.

35) Format all numbers from **D2:J13** as currency, correct to two decimal places.



- 36) Insert a row at the top of the spreadsheet and give it the heading **Wages**.
- 37) Centre and merge the spreadsheet heading 'Wages' across the spreadsheet.
- 38) Change the heading to size 14 and make it bold.
- 39) Embolden and centre all headings in **Row 2**.
- 40) Change the page orientation to **LANDSCAPE**.
- 41) Save the document as **Salary\_2**.
- 42) Print the document.
- 43) Change **C5** to **426**.
- 44) Change **E8** to **216**.
- 45) Change **B13** to **Maximum**.
- 46) Change the formula in **D14** to work out the maximum amount for **D3:D10**.
- 47) Copy the formula across to **E13**.
- 48) Rename Sheet 1 and call it **Wages**.
- 49) Turn on gridlines and headings for printing purposes. (for both worksheets)
- 50) Do a spell check on the document.
- 51) Enhance the document with colour, shading, etc.
- 52) Proofread the document.
- 53) Save the document as **Salary\_3**.
- 54) Print the document, ensuring it fits on one page.



## Spreadsheet Project 15

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Type in the following spreadsheet.

| Sales Rep          | Employer Number | Product 1 | Product 2 | Product 3 |
|--------------------|-----------------|-----------|-----------|-----------|
| Maguire, Anthony   | 74              | 312       | 103       | 0         |
| Martin, Philip     | 26              | 231       | 83        | 0         |
| Jacobs, Peter      | 51              | 467       | 97        | 0         |
| Brady, Bill        | 89              | 209       | 67        | 0         |
| McKenna, Dennis    | 103             | 331       | 52        | 0         |
| O'Grady, Darren    | 52              | 288       | 31        | 0         |
| Reilly, Luke       | 60              | 211       | 76        | 0         |
| Fitzpatrick, James | 33              | 369       | 28        | 0         |
| Tate, Alan         | 95              | 455       | 84        | 0         |
| Product Totals     |                 |           |           |           |



1. Adjust columns so that all text can be read.
2. Insert your name in the footer.
3. Save the spreadsheet as **Pay**.
4. Sort the spreadsheet so that the sales rep names are in alphabetical order going from **a to z**.
5. **Right-align** the names of the sales reps.
6. Insert a column before the Sales Rep column and give it the heading **Number**.
7. Use numbers 1 to 9 in **A2:A10**.
8. Create a formula in **D11** to calculate the totals for Product 1.
9. Copy the formula to **E11**.

10. Type the heading **Rep Totals** in **G1**.
11. Create a formula in **G2** to work out each rep's total by adding Product and 2.
12. Copy this formula from **G3:G10**.
13. Delete column F.
14. Add a column heading **Commission** in **G1**.
15. Create a formula in **G2** to work out 10% of the total in **F2**.
16. Copy the formula from **G3:G10**.
17. Add a column heading **Salary** in **H1**.
18. Create a formula in **H2** to work out the basic pay (€300) added to the commission.
19. Copy this formula from **H3:H10**.
20. Add a heading total **Tax** in **I1**.
21. Create a formula in **I2** to work out 20% tax on the salary.
22. Copy this formula from **I3:I10**.
23. Delete Row 10. (Alan Tate)
24. In **J1**, type in the heading **Net Pay**.
25. In **J2** create a formula to work out the **Net Pay** by subtracting the tax from the salary.
26. Copy this formula from **J3:J9**.
27. In **A12** type in a heading **Average Sales**.
28. In **D12** create a formula to work out the average product cost from **D2** to **D9**.
29. Copy this formula to **E12**.
30. In **A13** type in the heading **Minimum**.
31. In **D13** create a formula to work out the minimum amount for **D2:D9**.
32. Copy this formula to **E13**.

33. Format all numbers from **D2:J13** as currency, correct to two decimal places.
34. Insert a row at the top of the spreadsheet and give it the heading **Wages**.
35. Centre and merge the spreadsheet heading 'Wages' across the spreadsheet.
36. Change the heading to size 14 and make it bold.
37. Embolden and centre all headings in **Row 2**.
38. Change the page orientation to **LANDSCAPE**.
39. Save the document as **Pay\_2**.
40. Print the document.
41. Change **D3** to 200.
42. Change **C8** to 104.
43. Change **A14** to **Maximum**.
44. Change the formula in **D14** to work out the maximum amount for **D3:D10**.
45. Copy the formula across to E14.
46. Turn on gridlines and headings for printing purposes.
47. Do a spell check on the document.
48. Proofread the document.
49. Enhance the document with colour, shading, etc.
50. Save the document as **Pay\_3**.
51. Print the document, ensuring it fits on one page.



## Spreadsheet Project 16



The management of **Ben's Bakery** has decided to produce sales reports for their most popular products. This will allow them to have immediate access to accurate and up-to-date information on sales trends and to adjust their stock in line with these trends.

### Task 1: Setting up the spreadsheet

- Set up the spreadsheet with the headings shown, and input the data as shown below.
- Column widths should be adjusted to fit the data.
- Main and column headings should be centrally aligned and bold.
- Numeric and currency data should be right aligned.
- Save as **Bakery\_Sales**.

| Sales Report for present items |             |                 |             |        |          |              |
|--------------------------------|-------------|-----------------|-------------|--------|----------|--------------|
| Prod Code                      | Description | Production cost | Sales price | Profit | Quantity | Total profit |
| 384                            | White bread | €0.78           |             |        | 132      |              |
| 128                            | Brown bread | €0.89           |             |        | 145      |              |
| 228                            | Baguette    | €0.45           |             |        | 122      |              |
| 378                            | Rolls       | €0.45           |             |        | 178      |              |
| 290                            | Bagels      | €0.65           |             |        | 99       |              |
| 172                            | Panini      | €0.62           |             |        | 85       |              |
| 100                            | French loaf | €0.99           |             |        | 38       |              |
| 345                            | Crumpets    | €0.35           |             |        | 76       |              |
| 219                            | Soup rolls  | €0.36           |             |        | 79       |              |
| 267                            | Muffins     | €1.12           |             |        | 141      |              |
|                                |             |                 |             |        | Total:   |              |
|                                |             |                 |             |        | Average: |              |

## Task 2: Using formulas



- a) Use a formula to calculate the **Sales Price**, for each item, as 1.92 times the **Production Cost** and display in currency format with two decimal places.
- b) Use a formula to calculate the **Profit**, for each item, as the **Sales Price** minus the **Production Cost**.
- c) Work out the **Total Profit** for each item by multiplying the profit by the quantity sold.
- d) Use the SUM function to calculate the **Total** for the **Total Profit** column and display in currency format, in the appropriate position, with two decimal places.
- e) Use the Average function to calculate the **Average** for the **Total Profit** column and display in currency format, in the appropriate position, with two decimal places.
- f) Enhance the document.
- g) Save the spreadsheet as **Bakery\_Sales\_2**.
- h) Print one copy of the spreadsheet, ensuring it fits on one page.

## Task 3: Amending an existing spreadsheet

- a) Open the spreadsheet **Rep\_Wages** that you downloaded from the website.
- b) Save the spreadsheet as **Rep\_Wages**.
- c) Delete the row Number 7 (Pat Kenny).
- d) Insert a row under the Sales Rep **Michael Rourke**.
- e) Insert the following information:

| Number | Sales Rep            | Employer Number | Product 1 | Product 2 |
|--------|----------------------|-----------------|-----------|-----------|
| 9      | McGovern,<br>Pauline | 536             | €499      | €362      |

- f) Calculate the **Rep totals, Commission, Salary, Tax and Net Pay** on the same basis as for the other reps.
- g) Recalculate the **Average Sales** and **Maximum** values to take account of these deletions and insertions.
- h) Delete the column **Number**.
- i) Sort the spreadsheet so that all the reps names are in alphabetical order, without disturbing the layout of the spreadsheet.
- j) Save the spreadsheet as **Rep\_Wages\_2**.
- k) Print one copy of the spreadsheet.



#### Task 4: Completing the spreadsheet

- a) Change the formula to work out the **Commission** as 11% of the rep total.
- b) Copy this formula down.
- c) Save the spreadsheet as **Rep\_Wages\_3**.
- d) Print one copy of the spreadsheet, ensuring it fits on one page. Switch on gridlines for printing.

# Spreadsheet Project 17

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## Task 1: Spreadsheet theory

a) Identify eight possible uses for spreadsheets.

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b) Name 2 spreadsheet functions. Show how one of them could be used in a formula.

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c) Write the steps you take to create a spreadsheet document.

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d) Describe what a formula is and write down 3 different examples of formulas.

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e) Name 4 spreadsheet features.

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f) Define these spreadsheet terms:

formula bar

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sort, .e.g. A to Z

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value

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g) Name four data formatting types.

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h) How can you ensure that your worksheets/workbooks are sufficiently backed up and easy to locate?

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## Task 2: Setting up the spreadsheet

The management of **The Corner Shop** is producing sales reports.

- Set up the spreadsheet with the headings shown, and input the data as shown below.
- Column widths should be adjusted to fit the data.
- Main and column headings should be centrally aligned and bold.



| Sales Report for present stock items |              |                 |             |        |          |              |
|--------------------------------------|--------------|-----------------|-------------|--------|----------|--------------|
| Prod Code                            | Description  | Production cost | Sales price | Profit | Quantity | Total profit |
| 23842                                | Shampoo      | €1.09           |             |        | 785      |              |
| 23994                                | Toothpaste   | €0.89           |             |        | 1056     |              |
| 24832                                | Soap         | €0.45           |             |        | 1564     |              |
| 29043                                | Shower gel   | €1.25           |             |        | 856      |              |
| 21232                                | Conditioner  | €1.13           |             |        | 413      |              |
| 39923                                | Deodorant    | €1.25           |             |        | 870      |              |
| 20004                                | Body lotion  | €2.15           |             |        | 392      |              |
| 21632                                | Shaving foam | €1.42           |             |        | 471      |              |
| 27877                                | Toothbrush   | €2.35           |             |        | 478      |              |
| 28746                                | Aspirin      | €1.05           |             |        | 962      |              |
|                                      |              |                 |             |        | Total:   |              |
|                                      |              |                 |             |        | Average: |              |

- Numeric and currency data should be right aligned.
- Save as **Sales\_Report**.

### Task 3: Using formulas

- Use formula to calculate the **Sales Price**, for each item, as 1.95 times the **Production Cost** and display in currency format with two decimal places.
- Use formula to calculate the **Profit**, for each item, as the **Sales Price** minus the **Production Cost**.
- Work out the Total Profit, for each item, by multiplying the profit by the quantity sold.
- Use the SUM function to calculate the **Total** for the **Profit** column and display in currency format, in the appropriate position, with two decimal places.
- Use the Average function to calculate the **Average** for the **Total Profit** column and display in currency format, in the appropriate position, with two decimal places.
- Save the spreadsheet as **Sales\_Report\_1**.
- Print one copy of the spreadsheet.



### Task 4: Inserting and deleting

- Delete the rows with **Prod Codes** 39923 and 27877.
- Insert two rows after Aspirin.
- Add the following products to the spreadsheet:

|       |         |       |  |  |     |  |
|-------|---------|-------|--|--|-----|--|
| 34542 | Tissues | €0.99 |  |  | 784 |  |
|-------|---------|-------|--|--|-----|--|

|       |          |       |  |  |     |  |
|-------|----------|-------|--|--|-----|--|
| 22955 | Plasters | €1.28 |  |  | 862 |  |
|-------|----------|-------|--|--|-----|--|

- d) Calculate the **Sales Price** and **Profit** for these items on the same basis as for the other items.
- e) Recalculate the **Total:** and **Average:** values to take account of these deletions and insertions.
- f) Sort the spreadsheet so that all the products are in ascending order by **Prod Code**, without disturbing the layout of the spreadsheet.
- g) Save the spreadsheet as **Sales\_Report\_2**.
- h) Print one copy of the spreadsheet.

### Task 5: Amending the formula



- a) Change the formula to work out the sales price as 1.65 times the production cost.
- b) Copy this formula down.
- c) Enhance the spreadsheet, using centre, bold, font type, font size, colour, shading, etc.
- d) Check all cell formatting is correct and appropriate for the data, e.g. currency for prices.
- e) Ensure page orientation is landscape.
- f) Save the spreadsheet as **Sales\_Report\_3**.
- g) Print one copy of the spreadsheet, ensuring it fits on one page.

# Spreadsheet Project 18

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## Task 1: Theory questions

a) Explain suitable uses for spreadsheets.

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b) Give an explanation of the following terms:

i. cell

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ii. label

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iii. formula

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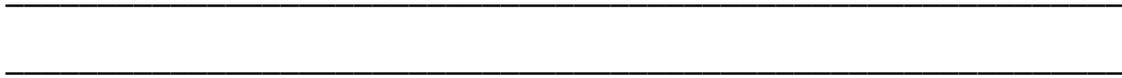
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iv. workbook

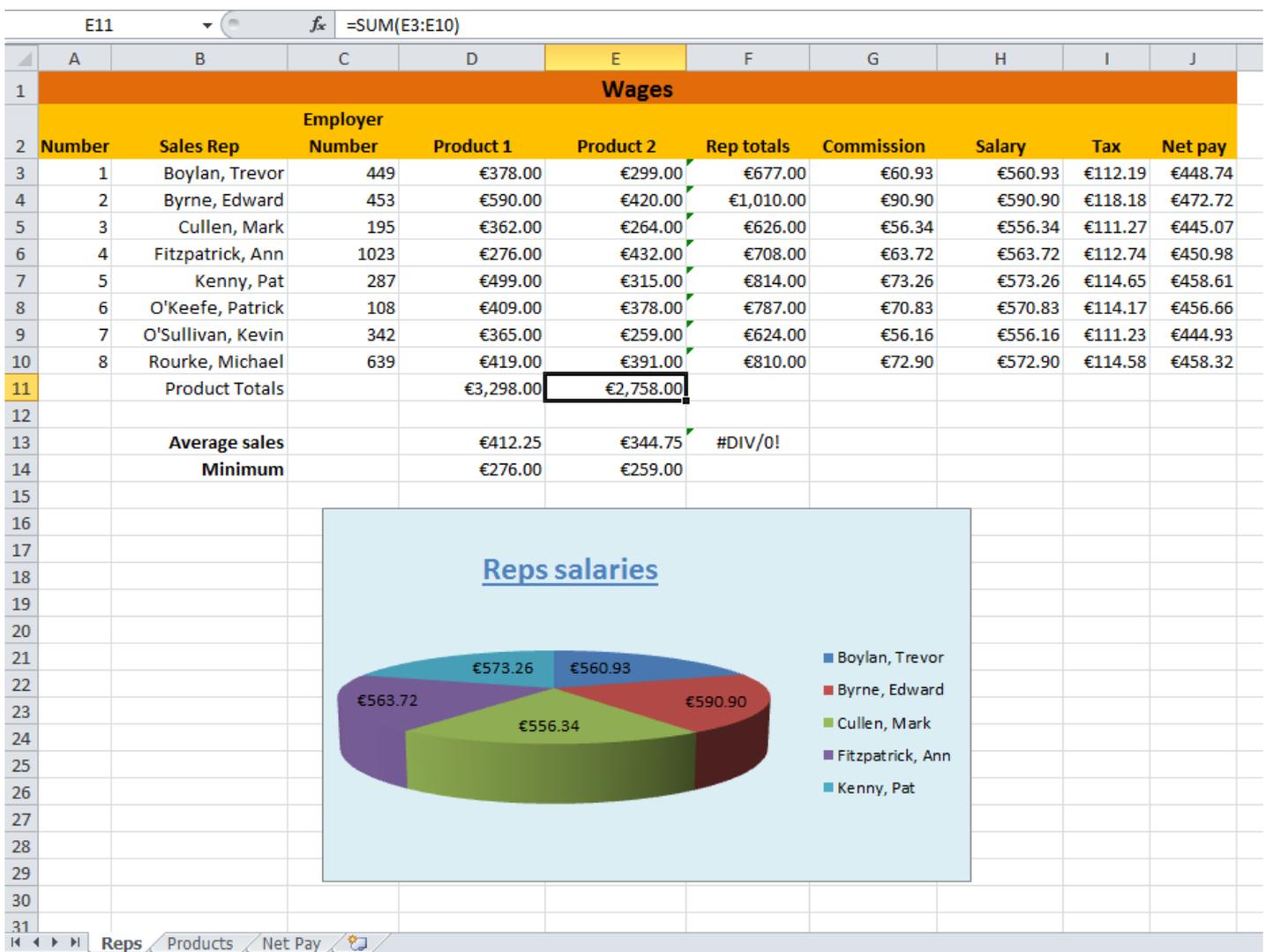
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v. number format



c) To show your understanding of the structure of a spreadsheet, label the spreadsheet with the following labels: **column**, **row**, **formula bar**, **worksheet bar**, **error code**, **legend**, **active cell**, **cell range**, **name box**, **chart title**.



## Task 2: Setting up the spreadsheet

The management of **The Music Shop** has decided to produce sales reports for various departments. This will allow them to have immediate access to accurate and up-to-date information on sales trends and to adjust their stock in line with these trends.



- Open the spreadsheet software.
- Set up the spreadsheet with the headings shown, and input the data as shown below.
- Column widths should be adjusted to fit the data.
- Main and column headings should be centrally aligned and bold.

| Sales Report for present stock items |               |                 |             |        |          |              |
|--------------------------------------|---------------|-----------------|-------------|--------|----------|--------------|
| Prod Code                            | Description   | Production cost | Sales price | Profit | Quantity | Total profit |
| 58234                                | DVD covers    | €0.99           |             |        | 134      |              |
| 52344                                | DVD/CD labels | €0.55           |             |        | 76       |              |
| 50923                                | Earphones     | €9.99           |             |        | 159      |              |
| 51212                                | DVD markers   | €2.38           |             |        | 354      |              |
| 59233                                | CD cleaner    | €3.55           |             |        | 341      |              |
| 60032                                | Key rings     | €1.35           |             |        | 562      |              |
| 52323                                | CD covers     | €0.79           |             |        | 164      |              |
| 59821                                | T-shirt       | €12.95          |             |        | 86       |              |
| 56456                                | Jumper        | €25.67          |             |        | 103      |              |
| 59002                                | Microphone    | €22.35          |             |        | 32       |              |
|                                      |               |                 |             |        | Total:   |              |
|                                      |               |                 |             |        | Average: |              |

- e) Change the **Production cost** for key rings to **€1.25**.
- f) Change the **Description** for **Product Code 59002** to **Collector's items**.
- g) Save the spreadsheet as **Music\_Shop**.
- h) Print the spreadsheet, using landscape orientation and gridlines.

### Task 3: Using formulas



- a) Use a formula to calculate the **Sales Price**, for each item, as 1.95 times the **Production Cost** and display in currency format with two decimal places.
- b) Use a formula to calculate the **Profit**, for each item, as the **Sales Price** minus the **Production Cost**.
- c) Work out the **Total Profit** for each item by multiplying the profit by the quantity sold.
- d) Use the SUM function to calculate the **Total** for the **Total Profit** column and display in currency format, in the appropriate position, with two decimal places.
- e) Use the Average function to calculate the **Average** for the **Total Profit** column and display in currency format, in the appropriate position, with two decimal places.
- f) Format the columns **Production cost**, **Sales price**, **Profit** and **Total profit** to currency.
- g) Enhance the document.
- h) Save the spreadsheet as **Music\_Shop\_1**.

- i) Print one copy of the spreadsheet, ensuring orientation is landscape and gridlines are on.

### Task 4: Amending an existing spreadsheet

- a) Open the spreadsheet **Tourist\_Shop** you downloaded from the website.
- b) Save the spreadsheet as **Tourist\_Shop**.
- c) Delete the row Number 4 (Jumper).
- d) Insert a row under the item **Picture**.
- e) Insert the following information:

| Number | Prod Code | Description | Production cost | Quantity | Stock rem |
|--------|-----------|-------------|-----------------|----------|-----------|
| 11     | 62        | Biscuit tin | €8.90           | 210      | 0         |



f) Calculate the **Sales price, Profit and Total Profit** on the same basis as for the other items.

g) Delete the column **Number**.  
 h) Under Average, type in **Maximum**.

i) Use a formula to calculate the maximum for the **Total Profit**

prices.

- j) Under Maximum, type **Average 2**.
- k) Use a formula in G16 to work out the average by dividing the **Total** by the number of items. (10) Example: G13/10
- l) Save the spreadsheet as **Tourist\_Shop\_1**.

m) Print one copy of the spreadsheet, ensuring orientation is landscape and gridlines are on. Your printout must fit on one page.

## Task 5: Completing the spreadsheet

- a) Adjust the row height for **Total (Row 13)** to **18**
- b) Adjust the column width for **Profit (Column E)** to **10**.
- c) Right align all items in the **Description** column.
- d) Ensure all labels are bold and centred.
- e) Ensure the overall heading **Sales Report for present stock items** is bold and centred across the spreadsheet.
- f) Ensure all cell formatting is correct, e.g. € to 2 decimal places for prices.
- g) Enhance the document.
- h) Save the spreadsheet as **Tourist\_Shop\_2**.
- i) Print one copy of the spreadsheet.



# Spreadsheet Project 19

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## Task 1: Theory questions

a) Describe the structure of a spreadsheet. Name and describe at least 5 features.

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b) Give an explanation of the following terms:

i. range

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ii. row

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iii. function

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iv. operation symbols

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v. #REF

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c) To show your understanding of the structure of a spreadsheet, label the spreadsheet with the following labels: **column label, merged heading, function, cell range, row, column, currency format, spreadsheet, shading, row header** (You only need to use each label once)

| Sales in November 2015 |         |                 |                    |            |            |            |
|------------------------|---------|-----------------|--------------------|------------|------------|------------|
| Item                   | Price   | Delivery Charge | Ordered This Month | Total      | Commission | New Total  |
| Bath Towels            | €6.95   | €5.00           | 319                | €3,812.05  | €304.96    | €3,507.09  |
| Bathroom Radio         | €24.95  | €8.00           | 150                | €4,942.50  | €395.40    | €4,547.10  |
| Bathroom Scales        | €99.95  | €10.00          | 63                 | €6,926.85  | €554.15    | €6,372.70  |
| BBQ                    | €199.95 | €20.00          | 38                 | €8,358.10  | €668.65    | €7,689.45  |
| Beach Towels           | €9.95   | €5.00           | 412                | €6,159.40  | €492.75    | €5,666.65  |
| Board Games            | €39.95  | €8.00           | 95                 | €4,555.25  | €364.42    | €4,190.83  |
| Book Shelf             | €49.95  | €15.00          | 168                | €10,911.60 | €872.93    | €10,038.67 |
| Camera                 | €69.95  | €10.00          | 112                | €8,954.40  | €716.35    | €8,238.05  |
| Card Games             | €14.95  | €5.00           | 243                | €4,847.85  | €387.83    | €4,460.02  |
| Totals                 | €516.55 | €86.00          | 1600               | €59,468.00 | €4,757.44  | €54,710.56 |
| Average                | €57.39  | €9.56           | €177.78            | €6,607.56  | €528.60    | €6,078.95  |
| Minimum                | €6.95   | €5.00           | €38.00             | €3,812.05  | €304.96    | €3,507.09  |
| Maximum                | €199.95 | €20.00          | €412.00            | €10,911.60 | €872.93    | €10,038.67 |

d) What are spreadsheets used for?

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## Task 2: Setting up the spreadsheet

The management of **The Health Cafe** produces sales reports for items on their menu.

### Task 1

- Set up the spreadsheet with the headings shown, and input the data as shown below.
- Column widths should be adjusted to fit the data.
- Main and column headings should be centrally aligned at
- Numeric and currency data should be right aligned.
- Type your name in the footer.
- Save as **Menu\_Sales**.
- Print one copy of the spreadsheet.



| Sales report for menu items |                  |                         |                |          |        |
|-----------------------------|------------------|-------------------------|----------------|----------|--------|
| Prod Code                   | Description      | Production<br>Cost/item | Sales<br>Price | Quantity | Profit |
| 854                         | Vegetable soup   | €0.85                   |                | 155      |        |
| 765                         | Roast veg panini | €2.35                   |                | 96       |        |
| 877                         | Green salad      | €1.95                   |                | 139      |        |
| 879                         | Health pizza     | €3.30                   |                | 177      |        |
| 565                         | Salad bagel      | €2.14                   |                | 53       |        |
| 786                         | Chicken sandwich | €3.23                   |                | 120      |        |
| 987                         | Thai curry       | €3.89                   |                | 62       |        |
| 468                         | Beef stir fry    | €4.10                   |                | 48       |        |
| 479                         | Fish pie         | €4.02                   |                | 26       |        |
| 965                         | Mushroom pasta   | €2.56                   |                | 138      |        |
|                             |                  |                         |                | Total:   |        |
|                             |                  |                         |                | Average: |        |

## Task 2: Using formulas

- Use a formula to calculate the **Sales Price**, for each item, as 2.65 times the **Production Cost / item** and display in currency format with two decimal places.
- Use a formula to calculate the **Profit**, for each item, as the **Sales Price** minus the **Production Cost** multiplied by the **Quantity**. Example:  

$$=(\text{Sales price} - \text{Production cost}) * \text{Quantity}$$
- Use the SUM function to calculate the **Total** for the **Profit** column and display in currency format, in the appropriate position, with two decimal places.
- Use the AVG (AVERAGE) function to calculate the **Average** for the **Profit** column and display in currency format, in the appropriate position, with two decimal places.
- Save the spreadsheet as **Menu\_Sales\_2**.
- Print one copy of the spreadsheet.



## Task 3: Inserting and deleting

- Delete the row with **Prod Code** 479.
- Insert two extra rows at the bottom of the list of products.
- Add the following products to the spreadsheet:

|     |             |       |       |    |       |
|-----|-------------|-------|-------|----|-------|
| 552 | Prawn salad | €4.67 | ----- | 73 | ----- |
| 921 | Risotto     | €3.50 | ----- | 51 | ----- |

- Calculate the **Sales Price** and **Profit** for these items on the same basis as for the other items.
- Recalculate the **Total:** and **Average:** values to take account of these deletions and insertions.
- Sort the spreadsheet so that all the products are in ascending order by **Prod Code**, without disturbing the layout of the spreadsheet.
- Save the spreadsheet as **Menu\_Sales\_3**.
- Ensure all headings (column and row) are centred and emboldened.
- Ensure all currency is in currency format, with 2 decimal places.
- Ensure the spreadsheet is LANDSCAPE and gridlines are on for printing.
- Enhance the document and proofread.
- Save all changes.
- Print one copy of the spreadsheet, ensuring it fits on one page.

# Spreadsheet Project 20

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## Task 1: Spreadsheet theory

a) Name 10 examples of how spreadsheets may be used. (5 marks)

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b) Give an explanation of the following terms: (2.5 marks)

i. cell reference

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ii. current cell

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iii. autosum

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iv. worksheet

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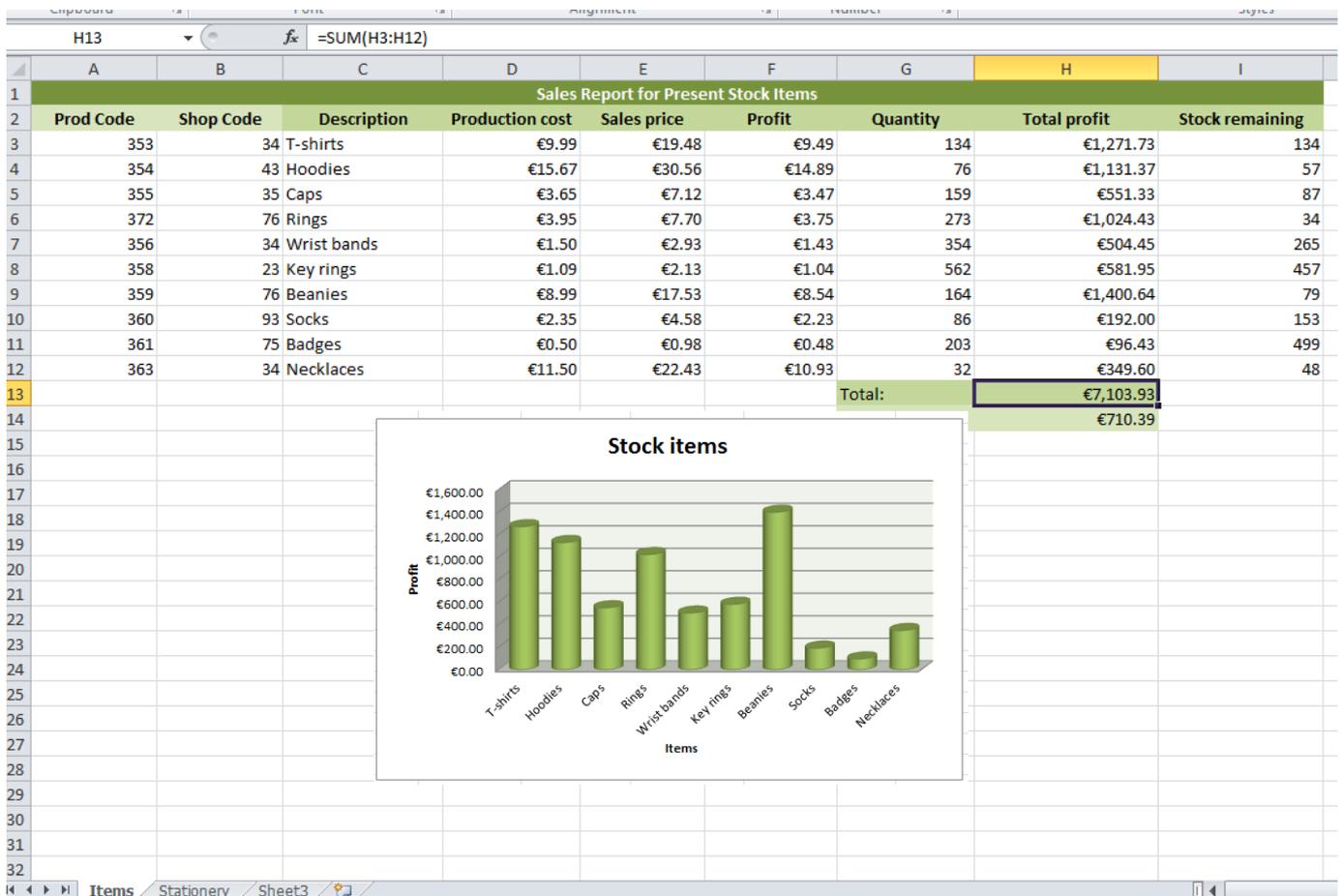
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v. gridlines

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c) To show your understanding of the structure, label the spreadsheet with the following labels: column, row, cell, value, label, currency format, text format, range, chart title, x axis, function, sheet tab, formula bar, name box, cell address, active cell, new sheet, merged and centred heading, bold text, column chart (each work 0.25 marks)



## Task 2: Setting up a spreadsheet

The management of **The Maths Shop** is producing sales reports to review their sales prices.



- Open the spreadsheet software. **(1 mark)**
- Set up the spreadsheet with the headings shown, and input the data as shown below.
- Column widths should be adjusted to fit the data.

**(3 marks)**

| Sales Report for present stock items |             |                 |             |        |          |              |
|--------------------------------------|-------------|-----------------|-------------|--------|----------|--------------|
| Prod Code                            | Description | Production cost | Sales price | Profit | Quantity | Total profit |
| 56                                   | Protractors | €0.99           |             |        | 134      |              |
| 87                                   | Rulers      | €0.55           |             |        | 76       |              |
| 23                                   | Erasers     | €0.59           |             |        | 159      |              |
| 11                                   | Pencils     | €0.38           |             |        | 354      |              |
| 98                                   | Compasses   | €3.55           |             |        | 341      |              |
| 12                                   | Maths sets  | €5.35           |             |        | 562      |              |
| 63                                   | Calculators | €12.79          |             |        | 164      |              |
| 76                                   | Set squares | €1.95           |             |        | 86       |              |
| 13                                   | Sharpener   | €0.67           |             |        | 103      |              |
| 99                                   | Fineliners  | €2.35           |             |        | 32       |              |
|                                      |             |                 |             |        | Total:   |              |
|                                      |             |                 |             |        | Average: |              |

- Main and column headings should be centrally aligned and bold.
- Change orientation to landscape and put on gridlines for printing and headings.
- Place your name in the header.

- g) Save the spreadsheet as **Maths\_Shop**.
- h) Print the spreadsheet.
- i) Change the **Production cost** for rulers to **€0.85**. **(0.5 marks)**
- j) Change the **Description** for **Product Code 99** to **Ballpoints**. **(0.5 marks)**
- k) Save the spreadsheet as **Maths\_Shop\_1**. **(0.25 marks)**
- l) Print the spreadsheet, using landscape orientation and gridlines. **(0.25 marks)**

### Task 3: Using formulas

- a) Use a formula to calculate the **Sales Price**, for each item, as 1.75 times the **Production Cost** and display in currency format with two decimal places. **(2 marks)**
- b) Use a formula to calculate the **Profit**, for each item, as the **Sales Price** minus the **Production Cost**. **(2 marks)**
- c) Work out the **Total Profit** for each item by multiplying the profit by the quantity sold. **(2 marks)**
- d) Use the SUM function to calculate the **Total** for the **Total Profit** column and display in currency format, in the appropriate position, with two decimal places. **(2 marks)**
- e) Use the Average function to calculate the **Average** for the **Total Profit** column and display in currency format, in the appropriate position, with two decimal places. **(2 marks)**
- f) Ensure the columns **Production cost**, **Sales price**, **Profit** and **Total profit** are formatted to currency. **(1 mark)**
- g) Enhance the document.
- h) Save the spreadsheet as **Maths\_Shop\_2**. **(0.25 marks)**

- i) Print one copy of the spreadsheet, ensuring orientation is landscape and gridlines are on. **(0.25 marks)**

**Task 4: Amending an existing spreadsheet**

- a) Open the spreadsheet **Salary\_April\_2016** that is provided on the memory key.
- b) Save the spreadsheet as **Salary\_April\_2016**.
- c) Delete the row Number 7 (Pied Piper). **(0.5 marks)**
- d) Insert a row under the Sales Rep **Peter Pan**. **(1 mark)**
- e) Insert the following information: **(0.5 marks)**

| Number | Sales Rep    | Employer Number | Product 1 | Product 2 |
|--------|--------------|-----------------|-----------|-----------|
| 9      | Mary Poppins | 482             | €361      | €471      |

- f) Calculate the **Rep totals, Commission, Salary, Tax and Net Pay** on the same basis as for the other reps. **(1 mark)**

- g) Delete the column **Number**. **(0.5 marks)**

- h) Change the **Minimum** to **Maximum** and recalculate for Product 1 and 2. **(0.5 marks)**

- i) In F16, add the **Total 1** and **Total 2** for **Outside reps**. **(0.5 marks)**

- j) In G16, divide this new total (in F16) by 2 to get the average totals for the **Outside reps**. **(0.5 marks)**

- k) Save the spreadsheet as **Salary\_April\_1**. **(0.25 marks)**



- l) Put your name in the header.
- m) Print one copy of the spreadsheet, ensuring orientation is landscape and gridlines are on. **(0.25 marks)**

### Task 5: Completing the spreadsheet

- a) Adjust the row height for **Outside Reps** to 20. **(0.5 marks)**
- b) Adjust the column width for **Sales Rep** to 20. **(0.5 marks)**
- c) Right align all items in the **Sales rep** column. **(0.5 marks)**
- d) Ensure all labels are bold and centred. **(0.25 marks)**
- e) Ensure the overall heading **Salary April** is bold and centred across the spreadsheet. **(0.25 marks)**
- f) Enhance the document.
- g) Save the spreadsheet as **Salary\_April\_2**. **(0.25 marks)**
- h) Print one copy of the spreadsheet. **(0.25 marks)**

**TOTAL: 35 MARKS**

