Level 3 Designing and producing spreadsheets to analyse information (7266/7267-043)

www.cityandguilds.com/e-quals07
March 2009
Version 2.0

e-Quals
Assignment guide for Candidates
Assignment B

About City & Guilds

City & Guilds is the UK's leading provider of vocational qualifications, offering over 500 awards across a wide range of industries, and progressing from entry level to the highest levels of professional achievement. With over 8500 centres in 100 countries, City & Guilds is recognised by employers worldwide for providing qualifications that offer proof of the skills they need to get the job done.

City & Guilds Group

The City & Guilds Group includes City & Guilds, ILM (the Institute of Leadership & Management) which provides management qualifications, learning materials and membership services, NPTC which offers land-based qualifications and membership services, and HAB (the Hospitality Awarding Body). City & Guilds also manages the Engineering Council Examinations on behalf of the Engineering Council.

Equal opportunities

City & Guilds fully supports the principle of equal opportunities and we are committed to satisfying this principle in all our activities and published material. A copy of our equal opportunities policy statement is available on the City & Guilds website.

Copyright

The content of this document is, unless otherwise indicated, © The City and Guilds of London Institute 2008 and may not be copied, reproduced or distributed without prior written consent.

However, approved City & Guilds centres and learners studying for City & Guilds qualifications may photocopy this document free of charge and/or include a locked PDF version of it on centre intranets on the following conditions:

- centre staff may copy the material only for the purpose of teaching learners working towards a City & Guilds qualification, or for internal administration purposes
- learners may copy the material only for their own use when working towards a City & Guilds qualification

The *Standard Copying Conditions* on the City & Guilds website also apply.

Please note: National Occupational Standards are not © The City and Guilds of London Institute. Please check the conditions upon which they may be copied with the relevant Sector Skills Council.

Publications

City & Guilds publications are available on the City & Guilds website or from our Publications Sales department at the address below or by telephoning +44 (0)20 7294 2850 or faxing +44 (0)20 7294 3387.

Every effort has been made to ensure that the information contained in this publication is true and correct at the time of going to press. However, City & Guilds' products and services are subject to continuous development and improvement and the right is reserved to change products and services from time to time. City & Guilds cannot accept liability for loss or damage arising from the use of information in this publication.

City & Guilds
1 Giltspur Street
London EC1A 9DD
T +44 (0)20 7294 2800
F +44 (0)20 7294 2400
www.cityandguilds.com
learnersupport@cityandguilds.com

Contents

Unit 043 – Designing and producing spreadsheets to analyse information Level 3

Assignment B

Introduction – Information for Candidates 2

Candidate instructions 3

Level 3 Designing and producing spreadsheets to analyse information (7266/7267-043)

Assignment B

Introduction – Information for Candidates

About this document

This assignment comprises all of the assessment for Level 3 Designing and producing spreadsheets to analyse information (7266/7267-028).

Health and safety

You are responsible for maintaining the safety of others as well as your own. You are asked to work safely at all times.

You will **not** be allowed to continue with an assignment if you compromise any of the Health and Safety requirements.

Time allowance

The recommended time allowance for this assignment is **two and a half hours**.

Level 3 Designing and producing spreadsheets to analyse information (7266/7267-043)
Candidate instructions

Time allowance: Two and a half hours

The assignment:

This assignment is made up of **four** tasks

- Task A - Setting up the spreadsheet and naming ranges
- Task B - Entering formula and functions to achieve required results
- Task C - Look ups and message insertion
- Task D - Using macros to automate

Scenario

You work for a kitchen supplier and have been asked to put together a spreadsheet that will enable costs and profit margins to be analysed.

You have been asked to ensure during the set up that data input is limited to certain fields only so that data integrity is maintained.

When creating your spreadsheets you should check all data validation that you use by using test data.

Read all of the instructions carefully and complete the tasks in the order given.

Task A – Setting up the spreadsheet and naming ranges

1 Create a folder in your work area or on removable storage media, with the name **kitchen**.

Open a spreadsheet application with a new blank spreadsheet.

Save this in your **kitchen** folder with the filename **orders**.

2 Create three worksheets in the **orders** spreadsheet with the names:

- **items**
- **suppliers**
- **supplier order form**.

Continued over…

3 Import the comma delimited files named **items.csv** into the **items** worksheet, starting at cell **A1**.

Import the file called **suppliers.csv** into the **suppliers** worksheet, starting at cell **A1**.

Import the file called **supplier order form.csv** into the **supplier order form** worksheet, starting at cell **A1**.

4 Delete any named ranges from all worksheets that may have been created when importing the three files.

5 In the **items** worksheet create the following named cells and ranges:

Name	Cell reference
item_ref	**A3:A29**
style	**B3:B29**
stock	**A3:F29**
costprice	**F3:F29**
markup	**G3:G29**
salesq1	**H3:H29**
salesq2	**I3:I29**
salesq3	**J3:J39**
salesq4	**K3:K29**
target	**L3:L29**
opcost	**O6**
dijon	**O8**
lyon	**O9**
paris	**O10**

In the **suppliers** worksheet create a named range called **supplier** for cells **A2:L4**

In the **supplier order form** worksheet create a named range called **reference** for cells **A15:A23**.

6 In cell **N7** add the title **Range MarkUp**.

Delete the word **MarkUp** from cells **N8:N10** and right align the remaining text (**Dijon**, **Lyon** and **Paris**).

Task B – Entering formula and functions to achieve required results

1 On the **Items** worksheet, create a function in cell **G3** that will automatically update the **Mark Up** price according to the style name used in column **B**.

Format the data under **Mark Up** as currency to **two** decimal places showing the local currency symbol.

Replicate this formula, according to the style, down to cell reference **G29**.

Continued over…

2 In cell **O4**, referring to the data in column **A**, enter a function that will calculate and display the total number of items available.

3 In cell **O6**, enter a formula that will display the operating costs per item based on the combined fixed and variable costs shown in **O2:O3** and the total number of lines stocked.

Format the cells as currency to **two** decimal places, showing the local currency symbol.

4 In cell **L3**, enter a function that will display the **quarterly** target break even sales.

The annual break even sales are the **opcost** which is an annual cost, based on the annual operating costs per item divided by **markup.**

Calculate the quarterly sales rounded up to the nearest whole number with no decimal places. Use the relevant named ranges in the function.

Replicate this function down to cell reference **L29**.

5 In cell **M3**, enter a function that will calculate and display the message **On Target** if the values shown in **SalesQ1**, **SalesQ2**, **SalesQ3** and **SalesQ4** are all equal to or greater than the value displayed in **Target Breakeven Sales per Qtr**. Otherwise display the message **Revise Mark Up**.

Use the relevant named ranges in the function.

6 Check your work and ensure that all formulas and functions have been replicated down to row 29 and save your spreadsheet as **orders 1**.

7 Set the print settings for the **items** worksheet to display gridlines, row headings, column headings, formulas so that all data can be seen and set to fit on one page wide in landscape orientation.

Insert a footer containing **your name**, the **date** and **orders 2**

Save the spreadsheet as **orders 2**.

8 Return to the **orders 1** spreadsheet and on the **suppliers** worksheet, insert a new column between **Last Name** and **Company**.

Label the new column **Contact**. In cell **E2**, using an appropriate formula or function, combine the data shown in **B2:D2** ensuring that there is a space between each of the three separate sets of data.

Replicate the function down to **E4** and save the spreadsheet as **orders 3**.

9 Copy the data in the **Contact** column (**E2:E4**) and paste the data back to the same area/range, so that the cell contents display the resulting information rather than the original formula or function. Delete columns **B:D**.

Resave your spreadsheet as **orders 4**.

Continued over…

Task C – Look ups and message insertion

1 In cell **F4** on the **suppliers order form** worksheet, enter a function that will automatically display the current date.

Format the date to display in the format **01 January 20XX**.

2 Merge and left align cells **B5:D5** and repeat the merge for the rows **6** to**12** in columns **B** to **D**.

In cell **A14**, insert the comment:

Only enter the same reference letters, create separate orders if reference letters differ.

3 Create a data validation rule for cells **A15:A23**, limit the list to that of the named range **item_ref**.

In cell **A15**, using the drop down arrow, select **D001**.

4 In cell **B15**, enter a function that will display an empty cell if the named range **reference** is blank, but otherwise lookups **reference** from the **stock** named range to display the name of the style based on the reference displayed in **A15**.

Replicate and adjust the function across the range **C15:F15** inclusive.

5 In cell **B5** on the **suppliers order form** worksheet, enter a function that will display an empty cell if **A15** is blank, but otherwise looks up B15 from the suppliers named range and returns the **Contact** information. Ensure your function is suitable for replication and if so replicate the function down to cell **B12**.

Adjust the **lookup** column value as required.

Save your worksheet as **orders 5**.

6 Set a data validation for cell **G15** to only accept the values **1** to **10** as whole numbers.

Set the cells to display an error alert warning message for any other value. Give the error alert the title: **Check Quantity!** Display the message: **Are you sure you have entered the correct quantity?**

Check that your warning message works then replicate the validation rule down the range to **G23**

After you have done this enter a value of **5** in cell **G15**.

7 In cell **H15** enter a function that will display an empty cell if named range **reference** is blank, but will otherwise calculate and display the item total based on **Cost Price** and **Qty**.

Replicate the function down to row **H23**.

Continued over…

8 In cell **H24**, enter a function that will calculate and display the **Nett total**.

In cell **H25**, enter a formula that will calculate and display the **VAT** based on **Nett** and the **VAT** rate.

In cell **H26**, enter a formula that will calculate and display the Gross total based on **Nett** and **VAT**.

Format **all** cells that will display currency amounts as currency to two decimal places and showing the local currency symbol.

Format **G25** as a percentage to **1** decimal place.

9 In cell **A16** select **D006** and in cell **G16** enter **2**.

In cell **A17** select **D008** and in cell **G17** enter **1**.

Shade the cells that are for end user data entry using a pale colour of your choice. All text **must** be clearly visible.

Adjust the column widths of **B:E** to **13** and centre align the contents of **B14:G23**.

10 Further enhance the **suppliers** order form to your own design by making a **minimum** of **3** changes to the spreadsheet.

Ensure all text remains clearly visible.

Save your worksheet as **orders 6**.

Task D – Using macros to automate

1 Create a macro named **PrintOrder** that selects the range of cells **A1:H26** on the **suppliers order form** worksheet and prints the selection on one page only.

Create a button on the **suppliers order form** worksheet and assign the **PrintOrder** macro to it.

Display the text **Print Order** using an Arial, 18pt, bold, Red format on the button.

Amend the footer information to display **your name** and **today's date**.

Use the macro button to print the order form.

2 Create a macro called **Clear** that will delete all data input cells that contain data.

Create a button on the **suppliers order form** worksheet and assign the **Clear** macro to it.

Amend the text on the button to display **Clear Form** in Arial, 18pt, bold and Red.

3 On the **items** worksheet hide columns **G**, **N** and **O**.

Protect the entire spreadsheet apart from the data entry areas and cell **A14** on the **suppliers order form** worksheet.

Allow users to have access only to the unlocked cells and **do not** password protect the spreadsheet.

Continued over…

4 Save your spreadsheet as **orders 7**.

Check your work and ensure that spreadsheets **orders** to **orders 7** are saved in the folder **kitchen** that you created.

Close all open applications and shut down the computer.

When you have finished working:

- Sign each document above your name and label all removable storage media with your name.
- Hand all paperwork and removable storage media to your assessor.

If the assignment is taken over more than one period, all paperwork and removable media must be returned to the test supervisor at the end of each sitting.

End of assignment

Published by City & Guilds
1 Giltspur Street
London
EC1A 9DD
T +44 (0)20 7294 2468
F +44 (0)20 7294 2400
www.cityandguilds.com

City & Guilds is a registered charity
established to promote education
and training