

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS  
Cambridge International Diploma in ICT  
Standard Level

**DATA ANALYSIS**

**5192/A**

Optional Module: Practical Assessment

2006

No Additional Materials are required

**1 hour  
plus 15 minutes reading time**

**READ THESE INSTRUCTIONS FIRST**

Candidates are permitted **15 minutes** of reading time before attempting the paper.

Make sure that your **name**, **centre number** and **candidate number** are **printed** on **each page** that you are asked to produce.

Carry out **every** instruction in each task.

Tasks are numbered on the left hand side of the page, so that you can see what to do, step by step. On the right hand side of the page for each task, you will find a box which you can tick (✓) when you have completed the task; this checklist will help you to track your progress through the assessment.

Before each printout you should proof-read the document to make sure that you have followed all instructions correctly.

At the end of the assignment put **all** your printouts into the Assessment Record Folder.

This document consists of **4** printed pages.



You work for a gym equipment company called *Gymnastic*. Your manager has asked you to calculate the current stock position for stock items.

All currency values should be in dollars with the \$ sign visible.

1 Create a data model which looks like this:



1.1.1

Information Table	
Mark-up	0.05
	0.07
Number of stock items	
Small	
Large	

Date	Item	Size	Purchase	Increase	Sale
24/03/2006	Basic exercise bike				
30/03/2006	Cross trainer				
06/04/2006	Multi gym				
15/04/2006	Treadmill				
19/05/2006	Rowing machine				
20/05/2006	Trampoline				
26/05/2006	Benches				
02/06/2006	Punch bags				
02/06/2006	Weights				
07/06/2006	Elliptical cross trainers				
17/06/2006	Step trainer				
22/06/2006	Press				

The cells in these columns will represent:

<i>Date</i>	Date of item in stock (shown above in dd/mm/yyyy format, you may use mm/dd/yyyy if you prefer)
<i>Item</i>	The type of gym equipment
<i>Size</i>	Whether a large item or a small item
<i>Purchase</i>	The price paid for each item
<i>Increase</i>	The value added to each item based on the Purchase price. If the Purchase price is greater than or equal to 300, then the increase is 7%. Otherwise the increase is 5%.
<i>Sale</i>	The price each item is sold at including the Increase

Information Table	
<i>Mark-up</i>	The percentage increase added to all items
<i>Number of stock items</i>	Count of the number of items.

- 2 In the *Information Table* name the cell that holds the data 0.05 **five**  
Name the cell that holds the data 0.07 **seven**  1.1.3
- These named cells will be used to calculate the *Increase*
- 3 In the main table in the cell under *Increase*, enter a formula using IF. This  
formula calculates the mark-up on the first item.  1.1.4
- If the *Purchase* is greater than or equal to **300** then multiply the *Purchase* by  
the named cell **seven** to calculate the *Increase*
- If the *Purchase* is less than **300** then multiply the *Purchase* by the named cell  
**five** to calculate the *Increase*
- 4 In the main table in the cell under *Sale* enter a formula which adds the  
*Increase* to the *Purchase*  1.1.3
- 5 In the *Information Table* format the cells containing the data 0.05 and 0.07 to  
display the % value with 0 decimal places (for example 5%).  3.1.1
- 6 In the *Information Table* use COUNTIF to count the number of items where  
the *Size* is **Small**  1.1.4
- Place the result in the cell to the right of the heading *Small*
- In the *Information Table* use COUNTIF to count the number of items where  
the *Size* is **Large**
- Place the result in the cell to the right of the heading *Large*
- 7 Format the cells in the *Date* column to give the month in word format (for  
example: May 19, 2006 or 19 May 2006).  3.1.1
- 8 Format the cells in the *Purchase*, *Increase*, and *Sale* columns to display the \$  
sign (dollar) with 2 decimal places.  3.1.1
- 9 Copy down all formulae entered in steps 3 and 4 so that 12 rows of data can  
be entered.  1.1.1
- 10 Set your page orientation to landscape.  3.1.3
- 11 Save the data model and print a copy of the sheet showing the formulae  
used. Make sure that the contents of all cells are visible and that the printout  
fits onto a single printed page.  4.1.1

- 12 Enter the following data into the model to test that it works correctly:



1.1.2  
1.2.1

<i>Date</i>	<i>Item</i>	<i>Size</i>	<i>Purchase</i>
<i>March 24, 2006</i>	<i>Basic exercise bike</i>	<b>Small</b>	<b>94</b>
<i>March 30, 2006</i>	<i>Cross trainer</i>	<b>Large</b>	<b>295</b>
<i>April 6, 2006</i>	<i>Multi gym</i>	<b>Large</b>	<b>449</b>
<i>April 15, 2006</i>	<i>Treadmill</i>	<b>Large</b>	<b>839</b>
<i>May 19, 2006</i>	<i>Rowing machine</i>	<b>Small</b>	<b>519</b>
<i>May 20, 2006</i>	<i>Trampoline</i>	<b>Large</b>	<b>349</b>
<i>May 26, 2006</i>	<i>Benches</i>	<b>Small</b>	<b>139</b>
<i>June 2, 2006</i>	<i>Punch bags</i>	<b>Small</b>	<b>258</b>
<i>June 2, 2006</i>	<i>Weights</i>	<b>Small</b>	<b>79</b>
<i>June 7, 2006</i>	<i>Elliptical cross trainers</i>	<b>Large</b>	<b>444</b>
<i>June 17, 2006</i>	<i>Step trainer</i>	<b>Small</b>	<b>45</b>
<i>June 22, 2006</i>	<i>Press</i>	<b>Small</b>	<b>88</b>

- 13 Save this data and print a copy showing the values. Make sure that the contents of all cells are visible and that the printout fits onto a single printed page.



4.1.1

- 14 Produce a printout showing only the rows where the *Size* is *Large*



2.1.1  
4.1.1

- 15 Produce a printout from all the data showing only the rows where the *Date* is after *1 June 2006* and the *Purchase* is greater than *150*



2.1.1  
4.1.1

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