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**DATA ANALYSIS**

**5192/A**

Optional Module: Practical Assessment

**2007**

**1 hour plus 15 minutes reading time**

No Additional Materials are required

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**READ THESE INSTRUCTIONS FIRST**

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

Make sure that your **Centre number, candidate number and name** are clearly visible on **each printout** that you are asked to produce, before it is sent to the printer.

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.

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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 levels for equipment that the company sells.

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	0.03
	0.05
Number of stock items	
Full	
Upper	
Lower	

Date	Item	Body workout	Cost	Increase	Value
24/02/2007	Basic exercise bike				
30/03/2007	Cross trainer				
06/04/2007	Multi gym				
15/04/2007	Treadmill				
19/05/2007	Rowing machine				
20/05/2007	Trampoline				
26/05/2007	Benches				
02/06/2007	Punch bags				
02/06/2007	Weights				
07/06/2007	Elliptical cross trainers				
17/06/2007	Step trainer				
01/07/2007	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>Body workout</i>	Which area of the body is exercised eg full, upper or lower
<i>Cost</i>	The price paid for each item
<i>Increase</i>	The value added to each item based on the Cost. If the Cost is greater than or equal to 300, then the increase is 5%. Otherwise the increase is 3%.
<i>Value</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 *0.03* **three**  1.1.3  
Name the cell that holds the data *0.05* **five**
- 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  1.1.4  
formula calculates the mark-up on the first item.
- If the *Cost* is greater than or equal to **300** then multiply the *Cost* by the named cell **five** to calculate the *Increase*
- If the *Cost* is less than **300** then multiply the *Cost* by the named cell **three** to calculate the *Increase*
- 4 In the main table in the cell under *Value*, enter a formula which adds the  1.1.3  
*Increase* to the *Cost*
- 5 In the *Information Table* format the cells containing the data *0.03* and *0.05* to  3.1.1  
display the % value with 0 decimal places (for example 5%).
- 6 In the *Information Table* use COUNTIF to count the number of items where  1.1.4  
the *Body workout* is **Full**  
Place the result in the cell to the right of the heading *Full*
- In the *Information Table* use COUNTIF to count the number of items where  
the *Body workout* is **Upper**  
Place the result in the cell to the right of the heading *Upper*
- In the *Information Table* use COUNTIF to count the number of items where  
the *Body workout* is **Lower**  
Place the result in the cell to the right of the heading *Lower*
- 7 Format the cells in the *Date* column to give the month in word format (for  3.1.1  
example: May 19, 2007 or 19 May 2007).
- 8 Format the cells in the *Cost*, *Increase* and *Value* columns to display the \$  3.1.1  
sign (dollar) with 2 decimal places.
- 9 Copy down all formulae entered in steps 3 and 4 so that 12 rows of data can  1.1.1  
be entered.
- 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  3.1.2  
used. Make sure that the contents of all cells are visible and that the printout  4.1.1  
fits onto a single printed page.

- 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>Body workout</i>	<i>Cost</i>
<i>February 24, 2007</i>	<i>Basic exercise bike</i>	<b>Lower</b>	<b>105</b>
<i>March 30, 2007</i>	<i>Cross trainer</i>	<b>Full</b>	<b>300</b>
<i>April 6, 2007</i>	<i>Multi gym</i>	<b>Full</b>	<b>478</b>
<i>April 15, 2007</i>	<i>Treadmill</i>	<b>Lower</b>	<b>894</b>
<i>May 19, 2007</i>	<i>Rowing machine</i>	<b>Full</b>	<b>545</b>
<i>May 20, 2007</i>	<i>Trampoline</i>	<b>Lower</b>	<b>369</b>
<i>May 26, 2007</i>	<i>Benches</i>	<b>Upper</b>	<b>157</b>
<i>June 2, 2007</i>	<i>Punch bags</i>	<b>Upper</b>	<b>294</b>
<i>June 2, 2007</i>	<i>Weights</i>	<b>Upper</b>	<b>65</b>
<i>June 7, 2007</i>	<i>Elliptical cross trainers</i>	<b>Lower</b>	<b>400</b>
<i>June 17, 2007</i>	<i>Step trainer</i>	<b>Lower</b>	<b>25</b>
<i>July 1, 2007</i>	<i>Press</i>	<b>Upper</b>	<b>90</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.



3.1.2  
4.1.1

- 14 Produce a printout showing only the rows where the *Body workout* is *Full*



2.1.1  
4.1.1

- 15 Produce a printout from all the data showing only the rows where the *Date* is between *01 May 2007* and *10 June 2007* and the *Cost* is greater than *400*



2.1.1  
4.1.1

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