

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

Cambridge International Diploma Standard Level

MARK SCHEME for the 2005 question paper

CAMBRIDGE INTERNATIONAL DIPLOMA IN ICT

5192 Data Analysis, maximum mark 100

This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which Examiners were initially instructed to award marks. They do not indicate the details of the discussions that took place at an Examiners' meeting before marking began. Any substantial changes to the mark scheme that arose from these discussions will be recorded in the published *Report on the Examination*.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes must be read in conjunction with the question papers and the *Report on the Examination*.

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UNIVERSITY of CAMBRIDGE
International Examinations

2005

CAMBRIDGE INTERNATIONAL DIPLOMA

Standard Level

MARK SCHEME

MAXIMUM MARK: 100

PAPER: 5192/A

ICT (Data Analysis)



UNIVERSITY of CAMBRIDGE
International Examinations

Formula:
Countif the number of Large
Countif the number of Small
 Alignment not important
 Row/Column may not be the same as this example
 Do not penalise the use of named cells/
 ranges

Formula:
If increase >=300 then use content of named cell 'five, else used content of named cell 'three* and multiply the content by Purchase price
 Alignment not important
 Row/Column may not be the same as this example
 Must display the use of a named range

Formula:
Sale = Purchase + Increase

Information table	
Mark-up	0.03
	0.05
Number of items	
Small	=COUNTIF(C9:C20,"Small")
Large	=COUNTIF(C9:C20,"Large")

Date	Item	Size of item	Purchase	Increase	Sale
	Cafe espresso			=IF(D9>=300,D9*five,D9*three)	=SUM(D9:E9)
	Freezer			=IF(D10>=300,D10*five,D10*three)	=SUM(D10:E10)
	Fridge			=IF(D11>=300,D11*five,D11*three)	=SUM(D11:E11)
	Fridge/Freezer			=IF(D12>=300,D12*five,D12*three)	=SUM(D12:E12)
	Heater			=IF(D13>=300,D13*five,D13*three)	=SUM(D13:E13)
	Iron			=IF(D14>=300,D14*five,D14*three)	=SUM(D14:E14)
	Kettle			=IF(D15>=300,D15*five,D15*three)	=SUM(D15:E15)
	Microwave			=IF(D16>=300,D16*five,D16*three)	=SUM(D16:E16)
	Oven			=IF(D17>=300,D17*five,D17*three)	=SUM(D17:E17)
	Tumble Dryer			=IF(D18>=300,D18*five,D18*three)	=SUM(D18:E18)
	Vacuum Cleaner			=IF(D19>=300,D19*five,D19*three)	=SUM(D19:E19)
	Washing Machine			=IF(D20>=300,D20*five,D20*three)	=SUM(D20:E20)

Replication:
 Both formulae replicated correctly

Layout - Data model created as shown
 All of the formulae and labels are visible in cell
 Single Landscape orientation

Format Mark-up data to % with 0 dp

Information table	
Mark-up	3%
	5%
Number of items	
Small	6
Large	6

Format:
Date in this format

Date	Item	Size of item	Purchase	Increase	Sale
January 24, 2005	Cafe espresso	Small	\$29.00	\$0.87	\$29.87
January 30, 2005	Freezer	Large	\$399.00	\$19.95	\$418.95
February 5, 2005	Fridge	Large	\$305.00	\$15.25	\$320.25
February 15, 2005	Fridge/Freezer	Large	\$560.00	\$28.00	\$588.00
March 19, 2005	Heater	Small	\$20.00	\$0.60	\$20.60
March 20, 2005	Iron	Small	\$15.00	\$0.45	\$15.45
March 26, 2005	Kettle	Small	\$25.00	\$0.75	\$25.75
April 2, 2005	Microwave	Small	\$250.00	\$7.50	\$257.50
May 2, 2005	Oven	Large	\$678.00	\$33.90	\$711.90
May 7, 2005	Tumble Dryer	Large	\$299.00	\$8.97	\$307.97
May 17, 2005	Vacuum Cleaner	Small	\$78.00	\$2.34	\$80.34
May 22, 2005	Washing Machine	Large	\$695.00	\$34.75	\$729.75

Test data:

Date, Size of item and Purchase columns must be 100% accurate.

Format the results in the Purchase, Increase and Sales columns to 2dp displaying \$

Page orientation not specified
This printout must show data and fit on a single page

Page 3	Mark Scheme	Syllabus
	CAMBRIDGE INTERNATIONAL DIPLOMA – 2005	5191/A

Searching:
Size of item equal Small
 Only these six rows should be visible

Date	Item	Size of item	Purchase	Increase	Sale
January 24, 2005	Cafe espresso	Small	\$29.00	\$0.87	\$29.87
March 19, 2005	Heater	Small	\$20.00	\$0.60	\$20.60
March 20, 2005	Iron	Small	\$15.00	\$0.45	\$15.45
March 26, 2005	Kettle	Small	\$25.00	\$0.75	\$25.75
April 2, 2005	Microwave	Small	\$250.00	\$7.50	\$257.50
May 17, 2005	Vacuum Cleaner	Small	\$78.00	\$2.34	\$80.34

Searching:
Date greater than 13/03/05 and Purchase is greater than 550
 Only these two rows should be visible

Date	Stock item	Size of item	Purchase	Increase	Sale
May 2, 2005	Oven	Large	\$678.00	\$33.90	\$711.90
May 22, 2005	Washing Machine	Large	\$695.00	\$34.75	\$729.75

2005

CAMBRIDGE INTERNATIONAL DIPLOMA
Standard Level

MARK SCHEME
MAXIMUM MARK: 100
PAPER: 5192/B ICT (Data Analysis)

Formula:
Countif the number of Novice
Countif the number of Expert
 Alignment not important
 Row/Column may not be the same as this example
 Do not penalise the use of named cells/ ranges
 Formulae may vary from example.

Formula:
If Purchase >=300 then use content of named cell 'seven', else use content of named cell 'five' and multiply by Purchase price
 Alignment not important
 Row/Column may not be the same as this example
 Must display the use of a named range

Formula:
Sale = Purchase + Increase
 Alignment not important
 Row/Column may not be the same as this example

Information Table	
Mark-up	0.05
	0.07
Number of types	
Novice	=COUNTIF(\$C\$11:\$C\$22,A5)
Expert	=COUNTIF(\$C\$11:\$C\$22,A6)

Date	Make	Type	Purchase	Increase	Sale
	Argus			=IF(D11>=300,D11*seven,D11*five)	=SUM(D11:E11)
	Canon			=IF(D12>=300,D12*seven,D12*five)	=SUM(D12:E12)
	Casio			=IF(D13>=300,D13*seven,D13*five)	=SUM(D13:E13)
	Fuji			=IF(D14>=300,D14*seven,D14*five)	=SUM(D14:E14)
	Kodak			=IF(D15>=300,D15*seven,D15*five)	=SUM(D15:E15)
	Konica			=IF(D16>=300,D16*seven,D16*five)	=SUM(D16:E16)
	Minolta			=IF(D17>=300,D17*seven,D17*five)	=SUM(D17:E17)
	Nikon			=IF(D18>=300,D18*seven,D18*five)	=SUM(D18:E18)
	Olympus			=IF(D19>=300,D19*seven,D19*five)	=SUM(D19:E19)
	Pentax			=IF(D20>=300,D20*seven,D20*five)	=SUM(D20:E20)
	Sony			=IF(D21>=300,D21*seven,D21*five)	=SUM(D21:E21)
	Toshiba			=IF(D22>=300,D22*seven,D22*five)	=SUM(D22:E22)

Replication:
 Both formulae replicated correctly

Layout - Data model created as shown
 All of the formulae and labels are visible in cell
 Single page landscape orientation

Format Mark-up data to % with 0 dp

Information Table	
Mark-up	5%
	7%
Number of Types	
Novice	7
Expert	5

Format the results in the Purchase, Increase and Sale columns to 2dp/currency displaying the \$

Format Date to long date format

Date	Make	Type	Purchase	Increase	Sale
January 24, 2005	Argus	Novice	\$199.00	\$9.95	\$208.95
January 30, 2005	Canon	Novice	\$399.00	\$27.93	\$426.93
February 6, 2005	Casio	Novice	\$305.00	\$21.35	\$326.35
February 15, 2005	Fuji	Expert	\$560.00	\$39.20	\$599.20
March 19, 2005	Kodak	Novice	\$345.00	\$24.15	\$369.15
March 20, 2005	Konica	Novice	\$314.00	\$21.98	\$335.98
March 26, 2005	Minolta	Novice	\$399.00	\$27.93	\$426.93
April 2, 2005	Nikon	Expert	\$685.00	\$47.95	\$732.95
May 2, 2005	Olympus	Expert	\$1,299.00	\$90.93	\$1,389.93
May 7, 2005	Pentax	Novice	\$299.00	\$14.95	\$313.95
May 17, 2005	Sony	Expert	\$595.00	\$41.65	\$636.65
May 22, 2005	Toshiba	Expert	\$1,287.00	\$90.09	\$1,377.09

Test data:
Date, Type and Purchase columns must be 100% accurate.

Page orientation not specified
This printout must show data and fit on a single page

Page 3	Mark Scheme	Syllabus
	CAMBRIDGE INTERNATIONAL DIPLOMA – 2005	5192/B

Searching:
Type equal Novice
 Only these seven rows should be visible

Date	Make	Type	Purchase	Increase	Sale
January 24, 2005	Argus	Novice	\$199.00	\$9.95	\$208.95
January 30, 2005	Canon	Novice	\$399.00	\$27.93	\$426.93
February 6, 2005	Casio	Novice	\$305.00	\$21.35	\$326.35
March 19, 2005	Kodak	Novice	\$345.00	\$24.15	\$369.15
March 20, 2005	Konica	Novice	\$314.00	\$21.98	\$335.98
March 26, 2005	Minolta	Novice	\$399.00	\$27.93	\$426.93
May 7, 2005	Pentax	Novice	\$299.00	\$14.95	\$313.95

Searching:
Date after 01/05/05 and Purchase is greater than 350
 Only these three rows should be visible

Date	Make	Type	Purchase	Increase	Sale
May 2, 2005	Olympus	Expert	\$1,299.00	\$90.93	\$1,389.93
May 17, 2005	Sony	Expert	\$595.00	\$41.65	\$636.65
May 22, 2005	Toshiba	Expert	\$1,287.00	\$90.09	\$1,377.09