

MS Excel

Part II

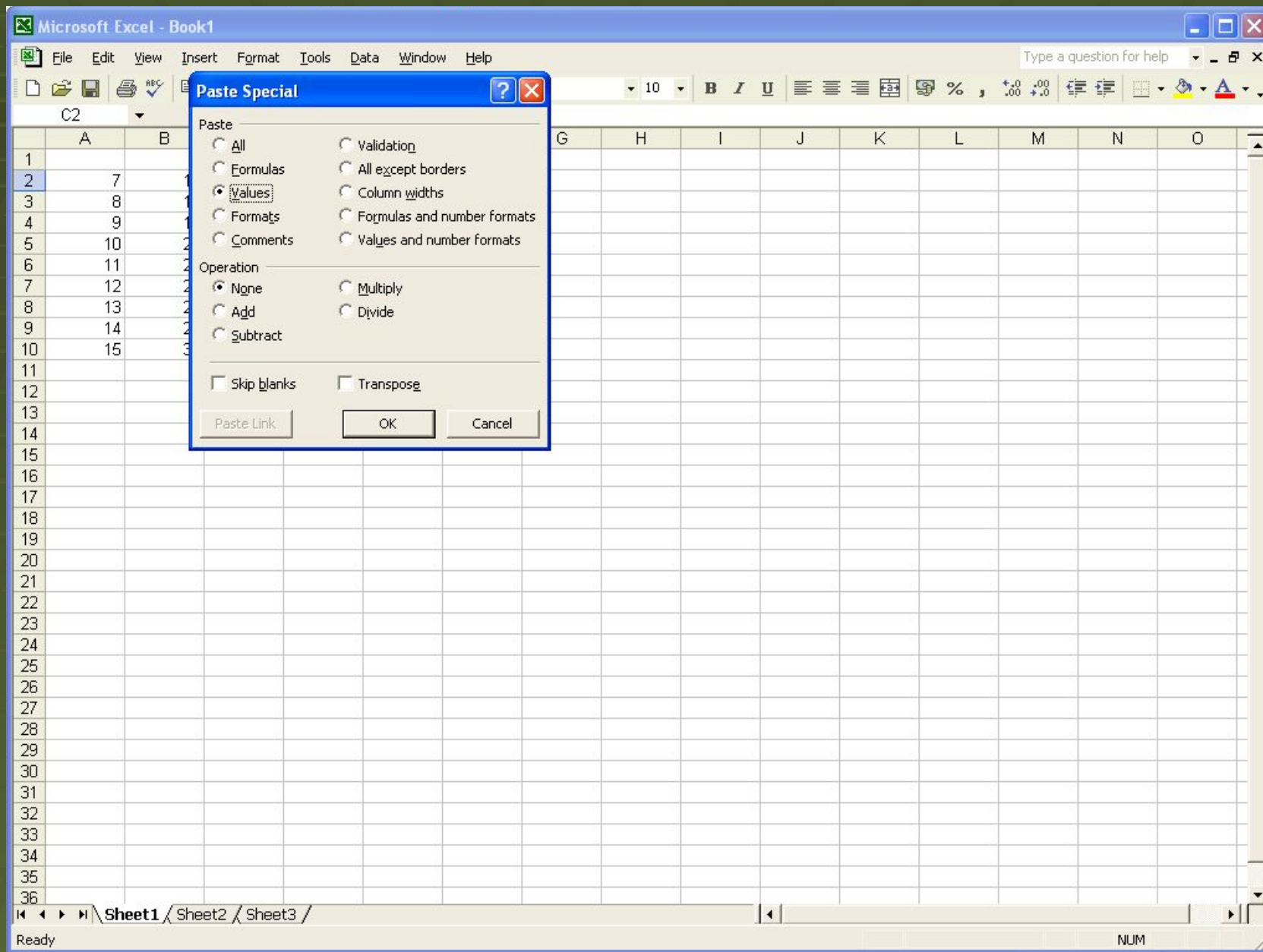
Специальная вставка

The screenshot shows the Microsoft Excel interface with a spreadsheet open. The active cell is C2, which contains the value 14. A context menu is displayed over this cell, with 'Paste Special...' selected. The spreadsheet contains the following data:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1															
2		7	14												
3		8	16												
4		9	18												
5		10	20												
6		11	22												
7		12	24												
8		13	26												
9		14	28												
10		15	30												
11															
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29															
30															
31															
32															
33															
34															
35															
36															

The context menu options are: Cut, Copy, Paste, Paste Special..., Insert Copied Cells..., Delete..., Clear Contents, Insert Comment, Format Cells..., Pick From List..., Add Watch, and Hyperlink... The 'Paste Special...' option is highlighted in blue.

Специальная вставка



Сортировка данных

Menu – Data – Sort

Меню – Данные – Сортировка

The screenshot shows a Microsoft Excel window titled "Microsoft Excel - CRYSTALL". The menu bar includes File, Edit, View, Insert, Format, Tools, Data, Window, and Help. The toolbar shows various icons for file operations and formatting. The active cell is A1, containing the formula =REMARK. The data table is as follows:

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	REMAI	2	minir	100	steps								
2	REMAI	2	final	ener	##	Kcal/mol							
3	END												
4	ATOM	1	C1	LIP	L	1	-26.771	4.29					
5	ATOM	2	C2	LIP	L	1	-26.972	5.39					
6	ATOM	3	C3	LIP	L	1	-26.527	7.79					
7	ATOM	4	C4	LIP	L	1	-25.870	9.08					
8	ATOM	5	C5	LIP	L	1	-26.261	6.68					
9	ATOM	6	C6	LIP	L	1	-27.522	3.04					
10	ATOM	7	C7	LIP	L	1	-26.190	10.2					
11	ATOM	8	C8	LIP	L	1	-25.599	11.5					
12	ATOM	9	C9	LIP	L	1	-25.951	12.7					
13	ATOM	10	C10	LIP	L	1	-25.388	13.9					
14	ATOM	11	C11	LIP	L	1	-25.791	15.2					
15	ATOM	12	C12	LIP	L	1	-25.141	16.4					
16	ATOM	13	C13	LIP	L	1	-25.575	17.7					
17	ATOM	14	C14	LIP	L	1	-27.354	1.94					
18	ATOM	15	C15	LIP	L	1	-28.118	0.701	-29.325		анр.74	фев.72	
19	ATOM	16	C16	LIP	L	1	-24.819	18.866	-27.321	0.00	0.00		
20	ATOM	17	O17	LIP	L	1	-25.203	20.094	-26.995	0.00	0.00		
21	ATOM	18	O18	LIP	L	1	-23.919	18.690	-28.093	0.00	0.00		
22	ATOM	19	C19	LIP	L	1	-26.154	20.442	-25.992	0.68	0.39		

The "Sort" dialog box is open, showing the following settings:

- Sort by: Column A
- Then by: (empty)
- Then by: (empty)
- My list has: No header row

The dialog box also includes radio buttons for Ascending and Descending sorting, and buttons for Options..., OK, and Cancel.

Построение диаграмм

Menu – Insert – Chart

Меню – Вставка – Диаграмма

The screenshot shows the Microsoft Excel interface with the Chart Wizard dialog box open. The spreadsheet data is as follows:

Row	Column A
1	
2	7
3	8
4	5
5	3
6	4
7	9

The Chart Wizard dialog box is titled "Chart Wizard - Step 1 of 4 - Chart Type". It has two tabs: "Standard Types" and "Custom Types". Under "Standard Types", the "Chart type:" list includes Column, Bar, Line, Pie, XY (Scatter), Area, Doughnut, Radar, Surface, Bubble, and Stock. The "Column" chart type is selected. Under "Chart sub-type:", there are several preview icons. The "Clustered Column" sub-type is selected, with a description: "Clustered Column. Compares values across categories." Below the description is a button that says "Press and Hold to View Sample". At the bottom of the dialog box are buttons for "Cancel", "< Back", "Next >", and "Finish".

Построение диаграмм

Microsoft Excel - Book1

File Edit View Insert Format Tools Data Window Help

Type a question for help

A2 fx

	A	B	C	D	E	F	G	H	I	J	K	L	M
1													
2	7												
3	8												
4	5												
5	3												
6	4												
7	9												
8													
9													
10													
11													
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29													
30													
31													

Chart Wizard - Step 2 of 4 - Chart Source Data

Data Range Series

Category	Value
1	7
2	8
3	5
4	3
5	4
6	9

Data range: =Sheet1!\$A\$2:\$A\$7

Series in:

- Rows
- Columns

Cancel < Back Next > Finish

Построение диаграмм

Microsoft Excel - Book1

File Edit View Insert Format Tools Data Window Help

Type a question for help

A1 fx

	A	B	C	D	E	F	G	H	I	J	K	L	M
1													
2		7											
3		8											
4		5											
5		3											
6		4											
7		9											
8													
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30													
31													

Chart Wizard - Step 3 of 4 - Chart Options

Titles Axes Gridlines Legend Data Labels Data Table

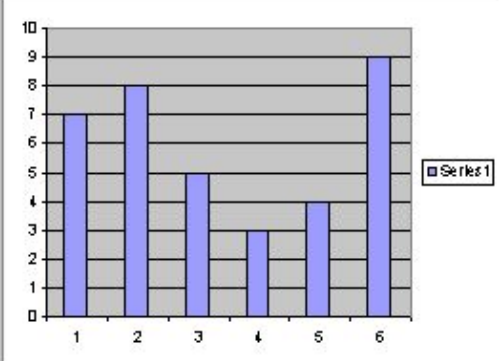
Chart title:

Category (X) axis:

Value (Y) axis:

Second category (X) axis:

Second value (Y) axis:



NUM SCRL

Ready

Построение диаграмм

The screenshot displays the Microsoft Excel interface with a data table and the Chart Wizard dialog box open.

Data Table:

	A	B	C	D	E	F	G	H	I	J	K	L	M
1													
2		7											
3		8											
4		5											
5		3											
6		4											
7		9											
8													
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31													

Chart Wizard - Step 4 of 4 - Chart Location

Place chart:

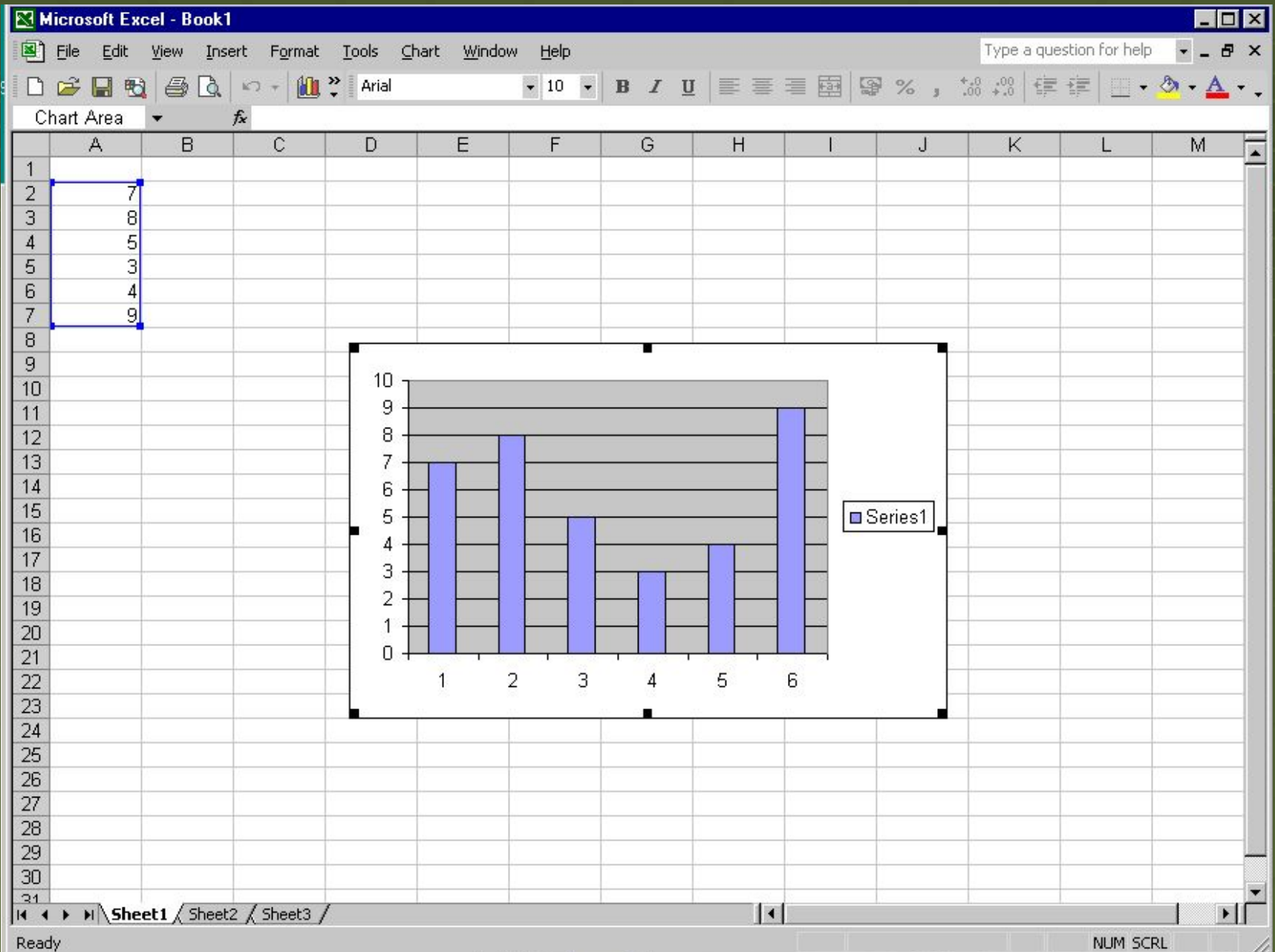
- As new sheet: Chart1
- As object in: Sheet1

Buttons: Cancel, < Back, Next >, Finish

Sheet tabs: Sheet1, Sheet2, Sheet3

Status bar: Ready, NUM SCRL

Диаграмма



Гистограмма

Гистограмма – средство анализа, которое рассчитывает частоты значений в выбранных диапазонах данных.

Пример: есть таблица молекулярных масс аминокислот. С помощью этого инструмента можно узнать распределение мол.масс а/к (т.е. сколько а/к имеют мол.массу в пределах от 110 до 130, например)

Аминокислота, иминокислота пролин	Масса аминокислоты (имино-)
A	89,09
C	121,16
D	133,1
E	147,13
F	165,19
G	75,07
H	155,1
I	131,17
K	146,19
L	131,17
M	149,21
N	132,12
P	115,13
Q	146,15
R	174,2
S	
T	
V	
W	
Y	



Гистограммы

Menu – Tools – Data Analysis

Меню – Сервис – Анализ данных

The screenshot shows Microsoft Excel with a data table and the Data Analysis dialog box open. The data table contains the following information:

	A	B	C	D	E	F	G	H	I	J	K	L
1												
2		Аминокислота, иминокислота пролин	Масса аминокислоты (имино-)									
3		A	89,09	карман (bin)								
4		C	121,16		70							
5		D	133,1		90							
6		E	147,13		110							
7		F	165,19		130							
8		G	75,07		150							
9		H	155,1		170							
10		I	131,17		190							
11		K	146,19		210							
12		L	131,17									
13		M	149,21									
14		N	132,12									
15		P	115,13									
16		Q	146,15									
17		R	174,2									
18		S	105,09									
19		T	119,12									
20		V	117,15									
21		W	204,22									
22		Y	181,19									

The Data Analysis dialog box is open, showing the following options:

- Anova: Single Factor
- Anova: Two-Factor With Replication
- Anova: Two-Factor Without Replication
- Correlation
- Covariance
- Descriptive Statistics
- Exponential Smoothing
- F-Test Two-Sample for Variances
- Fourier Analysis
- Histogram

Гистограммы

Menu – Tools – Data Analysis

Меню – Сервис – Анализ данных

The screenshot shows a Microsoft Excel spreadsheet with a table of amino acid data. The table has two columns: 'Аминокислота, иминокислота пролин' (Amino acid, imino acid proline) and 'Масса аминокислоты' (Mass of amino acid). The data rows are numbered 1 to 22. A dashed box highlights the 'Bin Range' (карман (bin)) in column E, with values from 70 to 210. A 'Histogram' dialog box is open, showing the 'Input Range' as '\$C\$3:\$C\$22', the 'Bin Range' as '\$E\$2:\$E\$10', and the 'Output Range' as '\$G\$2:\$H\$11'. The 'Labels' checkbox is checked, and the 'Output options' section is visible with 'Output Range' selected.

Аминокислота, иминокислота пролин	Масса аминокислоты
A	89,09
C	121,16
D	133,1
E	147,13
F	165,19
G	75,07
H	155,1
I	131,17
K	146,19
L	131,17
M	149,21
N	132,12
P	115,13
Q	146,15
R	174,2
S	105,09
T	119,12
V	117,15
W	204,22
Y	181,19

карман (bin)

70
90
110
130
150
170
190
210

Histogram

Input
Input Range: \$C\$3:\$C\$22
Bin Range: \$E\$2:\$E\$10
 Labels

Output options
 Output Range: \$G\$2:\$H\$11
 New Worksheet Ply:
 New Workbook

Pareto (sorted histogram)
 Cumulative Percentage
 Chart Output

OK
Cancel
Help

Гистограммы

Menu – Tools – Data Analysis

Меню – Сервис – Анализ данных

Аминокислота, иминокислота пролин	Масса аминокислоты (имино-) кислоты
A	89,09
C	121,16
D	133,1
E	147,13
F	165,19
G	75,07
H	155,1
I	131,17
K	146,19
L	131,17
M	149,21
N	132,12
P	115,13
Q	146,15
R	174,2
S	105,09
T	119,12
V	117,15
W	204,22
Y	181,19

карман (bin)	карман (bin)	Frequency
70	70	0
90	90	1
110	110	1
130	130	4
150	150	8
170	170	2
190	190	2
210	210	1
	More	0



Увидите результат

The screenshot shows a Microsoft Excel spreadsheet with the following data:

Количество по полю Остаток (код-1)	Итого
A	38
C	3
D	20
E	30
F	10
G	35
H	2
I	27
K	27
L	31
M	10
N	15
P	10
Q	13
R	14

A text box overlay is positioned over the 'Итого' column, containing the text: "В колонке 'итог' – число встреч буквы".