

Histogram & Pareto Charts



Timelapse



Step 1: Select Range B1:B1035

The screenshot shows the Microsoft Excel interface. The ribbon is set to the 'Home' tab. The 'Font' group shows 'Calibri' font and size '11'. The 'Number' group shows 'Number' as the format. The 'Cells' group shows 'Insert', 'Delete', and 'Format' options. The 'Editing' group shows 'AutoSum', 'Fill', 'Clear', 'Sort & Filter', and 'Find & Select'. The 'Add-ins' group shows 'Add-ins' and 'Analyze Data'. The status bar at the bottom shows 'Histogram & Pareto Charts' and 'Blank'.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	Name	Height(inches)	Weight(pounds)	Age																
2	Marie Brown	74	180	22.99																
3	Amber Wright	74	215	34.69																
4	Jessica Miller	72	210	30.78																
5	Timothy Edwards	72	210	35.43																
6	Martha Ruiz	73	188	35.71																
7	Joshua Wright	69	176	29.39																
8	Mark Ross	69	209	30.77																
9	Stephanie Martinez	71	200	35.07																
10	Kathleen Cox	76	231	30.19																
11	Paul Gomez	71	180	27.05																
12	Diane Martin	73	188	23.88																
13	Mark Walker	73	180	26.96																
14	Mark Roberts	74	185	23.29																
15	Helen Castillo	74	160	26.11																
16	Scott Howard	69	180	27.55																
17	Patrick Cox	70	185	34.27																
18	Richard Cruz	72	197	30																
19	Steven Ramos	73	189	27.99																
20	Kathleen Jimenez	75	185	22.38																
21	Justin Gomez	78	219	22.89																
22	Jeffrey Lewis	79	230	25.76																
23	James Green	76	205	36.33																
24	Gary Wood	74	230	31.17																
25	Steven Gutierrez	76	195	32.31																
26	Patricia Ruiz	72	180	31.03																
27	Anna Scott	71	192	29.26																
28	James Jackson	75	225	29.47																

Step 2: Insert Histogram Chart

The screenshot shows the Microsoft Excel interface with the 'Insert' tab selected. In the 'Charts' group, the 'Histogram' icon is highlighted with a green box. A green arrow points from the 'Insert' tab to the 'Histogram' icon. A tooltip for the 'Histogram' icon is visible, stating: "Use this chart type to: Show the distribution of the data grouped into bins." Below the tooltip, there is a link for "More Statistical Charts...".

The data table in the background is as follows:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	Name	Height(inches)	Weight(pounds)	Age																
2	Marie Brown	74	180	22.99																
3	Amber Wright	74	215	34.69																
4	Jessica Miller	72	210	30.78																
5	Timothy Edwards	72	210	35.43																
6	Martha Ruiz	73	188	35.71																
7	Joshua Wright	69	176	29.39																
8	Mark Ross	69	209	30.77																
9	Stephanie Martinez	71	200	35.07																
10	Kathleen Cox	76	231	30.19																
11	Paul Gomez	71	180	27.05																
12	Diane Martin	73	188	23.88																
13	Mark Walker	73	180	26.96																
14	Mark Roberts	74	185	23.29																
15	Helen Castillo	74	160	26.11																
16	Scott Howard	69	180	27.55																
17	Patrick Cox	70	185	34.27																
18	Richard Cruz	72	197	30																
19	Steven Ramos	73	189	27.99																
20	Kathleen Jimenez	75	185	22.38																
21	Justin Gomez	78	219	22.89																
22	Jeffrey Lewis	79	230	25.76																
23	James Green	76	205	36.33																
24	Gary Wood	74	230	31.17																
25	Steven Gutierrez	76	195	32.31																
26	Patricia Ruiz	72	180	31.03																
27	Anna Scott	71	192	29.26																
28	James Jackson	75	225	29.47																

The histogram chart, titled "Chart Title", displays the distribution of height data. The x-axis represents height bins, and the y-axis represents frequency. The bins and their corresponding frequencies are as follows:

Bin Range	Frequency
[67, 67.8]	0
(67.8, 68.6]	10
(68.6, 69.4]	20
(69.4, 70.2]	50
(70.2, 71]	90
(71, 71.8]	150
(71.8, 72.6]	170
(72.6, 73.4]	180
(73.4, 74.2]	160
(74.2, 75]	100
(75, 75.8]	50
(75.8, 76.6]	20
(76.6, 77.4]	10
(77.4, 78.2]	5
(78.2, 79]	2
(79, 79.8]	1
(79.8, 80.6]	1
(80.6, 81.4]	1
(81.4, 82.2]	1
(82.2, 83]	1

Step 3: Edit Chart Name

The screenshot shows the Microsoft Excel interface with the 'Chart Design' tab selected. A histogram chart is displayed on the right side of the worksheet, titled 'Height Distribution'. A green arrow points from the 'Chart Styles' gallery to the chart's title box. The worksheet data is as follows:

Name	Height(inches)	Weight(pounds)	Age
Marie Brown	74	180	22.99
Amber Wright	74	215	34.69
Jessica Miller	72	210	30.78
Timothy Edwards	72	210	35.43
Martha Ruiz	73	188	35.71
Joshua Wright	69	176	29.39
Mark Ross	69	209	30.77
Stephanie Martinez	71	200	35.07
Kathleen Cox	76	231	30.19
Paul Gomez	71	180	27.05
Diane Martin	73	188	23.88
Mark Walker	73	180	26.96
Mark Roberts	74	185	23.29
Helen Castillo	74	160	26.11
Scott Howard	69	180	27.55
Patrick Cox	70	185	34.27
Richard Cruz	72	197	30
Steven Ramos	73	189	27.99
Kathleen Jimenez	75	185	22.38
Justin Gomez	78	219	22.89
Jeffrey Lewis	79	230	25.76
James Green	76	205	36.33
Gary Wood	74	230	31.17
Steven Gutierrez	76	195	32.31
Patricia Ruiz	72	180	31.03
Anna Scott	71	192	29.26
James Jackson	75	225	29.47

Step 4: Format Chart Axis

The screenshot displays the Microsoft Excel interface with a histogram chart titled "Height Distribution" embedded in a spreadsheet. The spreadsheet data is as follows:

Name	Height(inches)	Weight(pounds)	Age
Marie Brown	74	180	22.99
Amber Wright	74	215	34.69
Jessica Miller	72	210	30.78
Timothy Edwards	72	210	35.43
Martha Ruiz	73	188	35.71
Joshua Wright	69	176	29.39
Mark Ross	69	209	30.77
Stephanie Martinez	71	200	35.07
Kathleen Cox	76	231	30.19
Paul Gomez	71	180	27.05
Diane Martin	73	188	23.88
Mark Walker	73	180	26.96
Mark Roberts	74	185	23.29
Helen Castillo	74	160	26.11
Scott Howard	69	180	27.55
Patrick Cox	70	185	34.27
Richard Cruz	72	197	30
Steven Ramos	73	189	27.99
Kathleen Jimenez	75	185	22.38
Justin Gomez	78	219	22.89
Jeffrey Lewis	79	230	25.76
James Green	76	205	36.33
Gary Wood	74	230	31.17
Steven Gutierrez	76	195	32.31
Patricia Ruiz	72	180	31.03
Anna Scott	71	192	29.26
James Jackson	75	225	29.47

The chart is a histogram with the horizontal axis representing height ranges and the vertical axis representing frequency. A context menu is open over the horizontal axis, with the "Format Axis..." option highlighted by a green box and a green arrow pointing to it.

Step 5: Edit Chart Bin Width

The screenshot displays the Microsoft Excel interface with a histogram titled "Height Distribution" based on the "Height(inches)" column of a data table. The "Format Axis" task pane is open on the right, and a green arrow points to the "Bin width" option, which is currently set to 1.0.

Name	Height(inches)	Weight(pounds)	Age
Marie Brown	74	180	22.99
Amber Wright	74	215	34.69
Jessica Miller	72	210	30.78
Timothy Edwards	72	210	35.43
Martha Ruiz	73	188	35.71
Joshua Wright	69	176	29.39
Mark Ross	69	209	30.77
Stephanie Martinez	71	200	35.07
Kathleen Cox	76	231	30.19
Paul Gomez	71	180	27.05
Diane Martin	73	188	23.88
Mark Walker	73	180	26.96
Mark Roberts	74	185	23.29
Helen Castillo	74	160	26.11
Scott Howard	69	180	27.55
Patrick Cox	70	185	34.27
Richard Cruz	72	197	30
Steven Ramos	73	189	27.99
Kathleen Jimenez	75	185	22.38
Justin Gomez	78	219	22.89
Jeffrey Lewis	79	230	25.76
James Green	76	205	36.33
Gary Wood	74	230	31.17
Steven Gutierrez	76	195	32.31
Patricia Ruiz	72	180	31.03
Anna Scott	71	192	29.26
James Jackson	75	225	29.47

Format Axis

- Axis Options
- Axis Options
 - Bins
 - By Category
 - Automatic
 - Bin width
 - Number of bins
 - Overflow bin Aut
 - Underflow bin Aut
 - Tick Marks
 - Number

Step 6: Copy & Paste Chart

The screenshot displays the Microsoft Excel interface with the following components:

- File Name:** 5. Histogram & Pareto Charts
- Tab:** Chart Design
- Worksheet:** Histogram & Pareto Charts
- Table Data:**

	A	B	C	D
	Name	Height(inches)	Weight(pounds)	Age
1				
2	Marie Brown	74	180	22.99
3	Amber Wright	74	215	34.69
4	Jessica Miller	72	210	30.78
5	Timothy Edwards	72	210	35.43
6	Martha Ruiz	73	188	35.71
7	Joshua Wright	69	176	29.39
8	Mark Ross	69	209	30.77
9	Stephanie Martinez	71	200	35.07
10	Kathleen Cox	76	231	30.19
11	Paul Gomez	71	180	27.05
12	Diane Martin	73	188	27.88
13	Mark Walker	73	180	27.05
14	Mark Roberts	74	185	23.11
15	Helen Castillo	74	160	26.11
16	Scott Howard	69	180	27.55
17	Patrick Cox	70	185	34.27
18	Richard Cruz	72	197	30.00
19	Steven Ramos	73	189	27.99
20	Kathleen Jimenez	75	185	22.38
21	Justin Gomez	78	219	22.89
22	Jeffrey Lewis	79	230	25.76
23	James Green	76	205	36.33
24	Gary Wood	74	230	31.17
25	Steven Gutierrez	76	195	32.31
26	Patricia Ruiz	72	180	31.03
27	Anna Scott	71	192	29.26
28	James Jackson	75	225	29.47

The chart, titled "Height Distribution", is a histogram showing the frequency of heights. The x-axis represents height bins (e.g., [67, 68], [68, 69], etc.), and the y-axis represents frequency (0 to 200). A green rounded rectangle highlights a second instance of this chart, indicating it is being copied or pasted.

Step 7: Edit Chart Name

The screenshot shows the Microsoft Excel interface with the following components:

- File Name:** 5. Histogram & Pareto Charts
- Chart Design Tab:** Active, showing options for Chart Styles, Data Tables, and Layouts.
- Worksheet Data:**

	A	B	C	D
1	Name	Height(inches)	Weight(pounds)	Age
2	Marie Brown	74	180	22.99
3	Amber Wright	74	215	34.69
4	Jessica Miller	72	210	30.78
5	Timothy Edwards	72	210	35.43
6	Martha Ruiz	73	188	35.71
7	Joshua Wright	69	176	29.39
8	Mark Ross	69	209	30.77
9	Stephanie Martinez	71	200	35.07
10	Kathleen Cox	76	231	30.19
11	Paul Gomez	71	180	27.05
12	Diane Martin	73	188	23.88
13	Mark Walker	73	180	26.96
14	Mark Roberts	74	185	23.29
15	Helen Castillo	74	160	26.11
16	Scott Howard	69	180	27.55
17	Patrick Cox	70	185	34.27
18	Richard Cruz	72	197	30
19	Steven Ramos	73	189	27.99
20	Kathleen Jimenez	75	185	22.38
21	Justin Gomez	78	219	22.89
22	Jeffrey Lewis	79	230	25.76
23	James Green	76	205	36.33
24	Gary Wood	74	230	31.17
25	Steven Gutierrez	76	195	32.31
26	Patricia Ruiz	72	180	31.03
27	Anna Scott	71	192	29.26
28	James Jackson	75	225	29.47
- Chart 1:** 'Height Distribution' histogram showing frequency of heights.
- Chart 2:** 'Weight Distribution' histogram showing frequency of weights. The title is highlighted with a green box, and a green arrow points to it from the 'Height Distribution' chart.

Step 8: Drag Range To Weight Column

The screenshot shows Microsoft Excel with a data table and two histograms. The data table has columns for Name, Height(inches), Weight(pounds), and Age. The Weight(pounds) column is highlighted with a red border. Two green arrows point from the ribbon to the 'Weight(pounds)' column header and the 'Weight(pounds)' data cells. The histograms show the distribution of Height and Weight.

	A	B	C	D
	Name	Height(inches)	Weight(pounds)	Age
1	Marie Brown	74	180	22.99
2	Amber Wright	74	215	34.69
3	Jessica Miller	72	210	30.78
4	Timothy Edwards	72	210	35.43
5	Martha Ruiz	73	188	35.71
6	Joshua Wright	69	176	29.39
7	Mark Ross	69	209	30.77
8	Stephanie Martinez	71	200	35.07
9	Kathleen Cox	76	231	30.19
10	Paul Gomez	71	180	27.05
11	Diane Martin	73	188	23.88
12	Mark Walker	73	180	26.96
13	Mark Roberts	74	185	23.29
14	Helen Castillo	74	160	26.11
15	Scott Howard	69	180	27.55
16	Patrick Cox	70	185	34.27
17	Richard Cruz	72	197	30
18	Steven Ramos	73	189	27.99
19	Kathleen Jimenez	75	185	22.38
20	Justin Gomez	78	219	22.89
21	Jeffrey Lewis	79	230	25.76
22	James Green	76	205	36.33
23	Gary Wood	74	230	31.17
24	Steven Gutierrez	76	195	32.31
25	Patricia Ruiz	72	180	31.03
26	Anna Scott	71	192	29.26
27	James Jackson	75	225	29.47

Height Distribution

Weight Distribution

Chart 17

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Clipboard Alignment Number Styles Cells Editing Add-ins

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General

Conditional Formatting Format as Table Cell Styles

Insert Delete Format

AutoSum Fill Clear

Sort & Filter Find & Select

Add-ins Analyze Data

Chart 17

fx

A B C D E F G H I J K L M N O P Q R S T

Height Distribution

Weight Distribution

Create my Excel

Step 9: Format Chart Axis

The screenshot displays the Microsoft Excel interface with the 'Chart Design' and 'Format' tabs active. A histogram chart is shown, with a context menu open over the horizontal axis. The 'Format Axis...' option is highlighted with a green box, and a green arrow points to it. The chart's horizontal axis labels are numerical ranges, and the vertical axis shows frequency values. The background data table is as follows:

	A	B	C	D
10	Kathleen Cox	76	231	30.19
11	Paul Gomez	71	180	27.05
12	Diane Martin	73	188	23.88
13	Mark Walker	73	180	26.96
14	Mark Roberts	74	185	23.29
15	Helen Castillo	74	160	26.11
16	Scott Howard	69	180	27.55
17	Patrick Cox	70	185	34.27
18	Richard Cruz	72	197	30
19	Steven Ramos	73	189	27.99
20	Kathleen Jimenez	75	185	22.38
21	Justin Gomez	78	219	22.89
22	Jeffrey Lewis	79	230	25.76
23	James Green	76	205	36.33
24	Gary Wood	74	230	31.17
25	Steven Gutierrez	76	195	32.31
26	Patricia Ruiz	72	180	31.03
27	Anna Scott	71	192	29.26
28	James Jackson	75	225	29.47
29	Dorothy Murphy	77	203	32.46
30	Gregory Bennett	74	195	35.67
31	Benjamin Roberts	73	182	25.89
32	Dennis Robinson	74	188	26.55
33	Amy Wright	78	200	24.17
34	Michelle Baker	73	180	26.69
35	Jane Cooper	75	200	25.13
36	Kathleen Patel	73	200	27.9
37	Raymond Clark	75	245	30.17

Step 10: Edit Chart Bin Width

The screenshot displays the Microsoft Excel interface with a histogram chart titled "Weight Distribution". The chart is overlaid on a data table. The "Format Axis" task pane is open on the right side of the screen, and a green arrow points to the "Bin width" field, which is currently set to 10.0. The task pane also shows options for "By Category", "Automatic", and "Number of bins".

	A	B	C	D
10	Kathleen Cox	76	231	30.19
11	Paul Gomez	71	180	27.05
12	Diane Martin	73	188	23.88
13	Mark Walker	73	180	26.96
14	Mark Roberts	74	185	23.29
15	Helen Castillo	74	160	26.11
16	Scott Howard	69	180	27.55
17	Patrick Cox	70	185	34.27
18	Richard Cruz	72	197	30
19	Steven Ramos	73	189	27.99
20	Kathleen Jimenez	75	185	22.38
21	Justin Gomez	78	219	22.89
22	Jeffrey Lewis	79	230	25.76
23	James Green	76	205	36.33
24	Gary Wood	74	230	31.17
25	Steven Gutierrez	76	195	32.31
26	Patricia Ruiz	72	180	31.03
27	Anna Scott	71	192	29.26
28	James Jackson	75	225	29.47
29	Dorothy Murphy	77	203	32.46
30	Gregory Bennett	74	195	35.67
31	Benjamin Roberts	73	182	25.89
32	Dennis Robinson	74	188	26.55
33	Amy Wright	78	200	24.17
34	Michelle Baker	73	180	26.69
35	Jane Cooper	75	200	25.13
36	Kathleen Patel	73	200	27.9
37	Raymond Clark	75	245	30.17

Step 11: Copy & Paste Chart

The screenshot displays the Microsoft Excel interface with the following elements:

- File Name:** 5. Histogram & Pareto Charts
- Current Tab:** Chart Design
- Chart Title:** Chart 18
- Data Table:**

	A	B	C	D
19	Steven Ramos	73	189	27.99
20	Kathleen Jimenez	75	185	22.38
21	Justin Gomez	78	219	22.89
22	Jeffrey Lewis	79	230	25.76
23	James Green	76	205	36.33
24	Gary Wood	74	230	31.17
25	Steven Gutierrez	76	195	32.31
26	Patricia Ruiz	72	180	31.03
27	Anna Scott	71	192	29.26
28	James Jackson	75	225	27.17
29	Dorothy Murphy	77	203	35.67
30	Gregory Bennett	74	195	35.67
31	Benjamin Roberts	73	182	25.89
32	Dennis Robinson	74	188	26.55
33	Amy Wright	78	200	24.17
34	Michelle Baker	73	180	26.69
35	Jane Cooper	75	200	25.13
36	Kathleen Patel	73	200	27.9
37	Raymond Clark	75	245	30.17
38	Melissa Garcia	75	240	31.36
39	Paul Sanders	74	215	30.99
40	Benjamin Hernandez	69	185	32.24
41	Brian Perez	71	175	27.61
42	Dorothy Williams	74	199	28.2
43	Anthony Thomas	73	200	28.85
44	Shirley Moore	73	215	24.21
45	Jennifer Gomez	76	200	22.02
46	Amber Hill	74	205	24.97
- Chart 1:** A histogram showing the distribution of weights. The x-axis represents weight bins (e.g., [150, 160]), and the y-axis represents frequency (0 to 200).
- Chart 2 (Copied):** A smaller version of the histogram titled "Weight Distribution", which is currently being copied as indicated by the green border and arrow.



Step 12: Edit Chart Name

The screenshot displays the Microsoft Excel interface with the 'Chart Design' tab selected. A histogram chart is visible, and its name 'Age Distribution' is being edited in a text box. A green arrow points to the chart area, and a green box highlights the text 'Age Distribution'.

Chart Data:

Age Range	Frequency
[150, 160]	20
[160, 170]	50
[170, 180]	120
[180, 190]	180
[190, 200]	190
[200, 210]	170
[210, 220]	140
[220, 230]	80
[230, 240]	40
[240, 250]	20
[250, 260]	10
[260, 270]	5
[270, 280]	2
[280, 290]	1

Worksheet Data:

Row	Name	Age	Weight
19	Steven Ramos	73	189
20	Kathleen Jimenez	75	185
21	Justin Gomez	78	219
22	Jeffrey Lewis	79	230
23	James Green	76	205
24	Gary Wood	74	230
25	Steven Gutierrez	76	195
26	Patricia Ruiz	72	180
27	Anna Scott	71	192
28	James Jackson	75	225
29	Dorothy Murphy	77	203
30	Gregory Bennett	74	195
31	Benjamin Roberts	73	182
32	Dennis Robinson	74	188
33	Amy Wright	78	200
34	Michelle Baker	73	180
35	Jane Cooper	75	200
36	Kathleen Patel	73	200
37	Raymond Clark	75	245
38	Melissa Garcia	75	240
39	Paul Sanders	74	215
40	Benjamin Hernandez	69	185
41	Brian Perez	71	175
42	Dorothy Williams	74	199
43	Anthony Thomas	73	200
44	Shirley Moore	73	215
45	Jennifer Gomez	76	200
46	Amber Hill	74	205



Step 13: Drag Range to Age Column

The screenshot displays the Microsoft Excel interface with the following elements:

- File Name:** 5. Histogram & Pareto Charts
- Current Tab:** Chart Design
- Clipboard:** Paste, Copy, Undo, Redo, AutoSave (Off)
- Font:** Calibri, Size 14, Bold, Italic, Underline, Text Color, Background Color
- Alignment:** Center, Left, Right, Indent, Merge & Center
- Number:** General, Currency, Percentage, Decimals, Thousands Separator
- Styles:** Conditional Formatting, Format as Table, Cell Styles
- Cells:** Insert, Delete, Format
- Editing:** AutoSum, Fill, Clear, Sort & Filter, Find & Select
- Chart Design:** Chart Elements, Chart Styles, Data Source

Data Table:

Row	Name	Age	Age
19	Steven Ramos	73	189
20	Kathleen Jimenez	75	185
21	Justin Gomez	78	219
22	Jeffrey Lewis	79	230
23	James Green	76	205
24	Gary Wood	74	230
25	Steven Gutierrez	76	195
26	Patricia Ruiz	72	180
27	Anna Scott	71	192
28	James Jackson	75	225
29	Dorothy Murphy	77	203
30	Gregory Bennett	74	195
31	Benjamin Roberts	73	182
32	Dennis Robinson	74	188
33	Amy Wright	78	200
34	Michelle Baker	73	180
35	Jane Cooper	75	200
36	Kathleen Patel	73	200
37	Raymond Clark	75	245
38	Melissa Garcia	75	240
39	Paul Sanders	74	215
40	Benjamin Hernandez	69	185
41	Brian Perez	71	175
42	Dorothy Williams	74	199
43	Anthony Thomas	73	200
44	Shirley Moore	73	215
45	Jennifer Gomez	76	200
46	Amber Hill	74	205

Top Histogram: Age Distribution (Bins: [150, 160], [160, 170], [170, 180], [180, 190], [190, 200], [200, 210], [210, 220], [220, 230], [230, 240], [240, 250], [250, 260], [260, 270], [270, 280], [280, 290])

Bottom Histogram: Age Distribution (Bins: [20.9, 22.4], [22.4, 23.9], [23.9, 25.4], [25.4, 26.9], [26.9, 28.4], [28.4, 29.9], [29.9, 31.4], [31.4, 32.9], [32.9, 34.4], [34.4, 35.9], [35.9, 37.4], [37.4, 38.9], [38.9, 40.4], [40.4, 41.9], [41.9, 43.4], [43.4, 44.9], [44.9, 46.4], [46.4, 47.9], [47.9, 49.4])

Step 14: Format Chart Axis

5. Histogram & Pareto Charts

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Clipboard Font Alignment Number Styles Cells Editing Add-ins

Chart 18

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
	Steven Ramos	73	189	27.99																
	Kathleen Jimenez	75	185	22.38																
	Justin Gomez	78	219	22.89																
	Jeffrey Lewis	79	230	25.76																
	James Green	76	205	36.33																
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	Steven Gutierrez	76	195	32.31																
	Patricia Ruiz	72	180	31.03																
	Anna Scott	71	192	29.26																
	James Jackson	75	225	29.47																
	Dorothy Murphy	77	203	32.46																
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	Benjamin Roberts	73	182	25.89																
	Dennis Robinson	74	188	26.55																
	Amy Wright	78	200	24.17																
	Michelle Baker	73	180	26.69																
	Jane Cooper	75	200	25.13																
	Kathleen Patel	73	200	27.9																
	Raymond Clark	75	245	30.17																
	Melissa Garcia	75	240	31.36																
	Paul Sanders	74	215	30.99																
	Benjamin Hernandez	69	185	32.24																
	Brian Perez	71	175	27.61																
	Dorothy Williams	74	199	28.2																
	Anthony Thomas	73	200	28.85																
	Shirley Moore	73	215	24.21																
	Jennifer Gomez	76	200	22.02																
	Amber Hill	74	205	24.97																

Context Menu:

- Delete
- Reset to Match Style
- Font...
- Change Chart Type...
- Select Data...
- 3-D Rotation...
- Add Major Gridlines
- Add Minor Gridlines
- Format Axis...

Horizontal Axis

Step 15: Edit Chart Bin Width

The screenshot displays the Microsoft Excel interface with a histogram chart titled "Age Distribution" and a task pane for editing its axis options. The histogram shows age bins from [150, 160] to [280, 290]. The task pane, titled "Format Axis", is open on the "Axis Options" tab, and the "Bin width" is set to 2.0. A green arrow points to the "Bin width" input field.

Name	Age	Score
Steven Gutierrez	76	195
Patricia Ruiz	72	180
Anna Scott	71	192
James Jackson	75	225
Dorothy Murphy	77	203
Gregory Bennett	74	195
Benjamin Roberts	73	182
Dennis Robinson	74	188
Amy Wright	78	200
Michelle Baker	73	180
Jane Cooper	75	200
Kathleen Patel	73	200
Raymond Clark	75	245
Melissa Garcia	75	240
Paul Sanders	74	215
Benjamin Hernandez	69	185
Brian Perez	71	175
Dorothy Williams	74	199
Anthony Thomas	73	200
Shirley Moore	73	215
Jennifer Gomez	76	200
Amber Hill	74	205
Andrew King	74	206
Benjamin Carter	70	186
Brian White	72	188
Scott Morgan	77	220
Joshua King	74	210
Jane Hernandez	70	195

Format Axis

- Axis Options
- Axis Options
 - Bins
 - By Category
 - Automatic
 - Bin width
 - Number of bins
 - Overflow bin Aut
 - Underflow bin Aut
- Tick Marks
- Number

Step 16: Copy & Paste Chart

The screenshot displays the Microsoft Excel interface with the following components:

- File Name:** 5. Histogram & Pareto Charts
- Current Tab:** Histogram & Pareto Charts
- Active Ribbon:** Chart Design
- Clipboard:** Paste
- Font:** Calibri, 14
- Alignment:** General
- Number:** General
- Cells:** Insert, Delete, Format
- Editing:** AutoSum, Fill, Clear, Sort & Filter, Find & Select
- Add-ins:** Add-ins, Analyze Data

Name	Height(inches)	Weight(pounds)	Age
Marie Brown	74	180	22.99
Amber Wright	74	215	34.69
Jessica Miller	72	210	30.78
Timothy Edwards	72	210	35.43
Martha Ruiz	73	188	35.71
Joshua Wright	69	176	29.39
Mark Ross	69	209	30.77
Stephanie Martinez	71	200	35.07
Kathleen Cox	76	231	30.19
Paul Gomez	71	180	27.05
Diane Martin	73	188	23.88
Mark Walker	73	180	26.96
Mark Roberts	74	185	23.29
Helen Castillo	74	160	26.11
Scott Howard	69	180	27.55
Patrick Cox	70	185	34.27
Richard Cruz	72	197	30
Steven Ramos	73	189	27.99
Kathleen Jimenez	75	185	22.38
Justin Gomez	78	219	22.89
Jeffrey Lewis	79	230	25.76
James Green	76	205	36.33
Gary Wood	74	230	31.17
Steven Gutierrez	76	195	32.31
Patricia Ruiz	72	180	31.03
Anna Scott	71	192	29.26
James Jackson	75	225	29.47

Height Distribution Chart: A histogram showing the frequency of heights. The x-axis represents height bins (e.g., [67, 68], [68, 69], etc.), and the y-axis represents frequency (0 to 200). The chart is highlighted with a green border.

Weight Distribution Chart: A histogram showing the frequency of weights. The x-axis represents weight bins (e.g., [67, 68], [68, 69], etc.), and the y-axis represents frequency (0 to 250).

Step 17: Change Chart Type

Excel interface showing a spreadsheet with data and two histograms. The 'Chart Design' ribbon is active, and the 'Change Chart Type...' option is highlighted in the context menu for the 'Height Distribution' chart.

	A	B	C	D
1	Name	Height(inches)	Weight(pounds)	Age
2	Marie Brown	74	180	22.99
3	Amber Wright	74	215	34.69
4	Jessica Miller	72	210	30.78
5	Timothy Edwards	72	210	35.43
6	Martha Ruiz	73	188	35.71
7	Joshua Wright	69	176	29.39
8	Mark Ross	69	209	30.77
9	Stephanie Martinez	71	200	35.07
10	Kathleen Cox	76	231	30.19
11	Paul Gomez	71	180	27.05
12	Diane Martin	73	188	23.88
13	Mark Walker	73	180	26.96
14	Mark Roberts	74	185	23.29
15	Helen Castillo	74	160	26.11
16	Scott Howard	69	180	27.55
17	Patrick Cox	70	185	34.27
18	Richard Cruz	72	197	30
19	Steven Ramos	73	189	27.99
20	Kathleen Jimenez	75	185	22.38
21	Justin Gomez	78	219	22.89
22	Jeffrey Lewis	79	230	25.76
23	James Green	76	205	36.33
24	Gary Wood	74	230	31.17
25	Steven Gutierrez	76	195	32.31
26	Patricia Ruiz	72	180	31.03
27	Anna Scott	71	192	29.26
28	James Jackson	75	225	29.47

Chart Design ribbon options: Clipboard, Font, Alignment, Number, Styles, Cells, Editing, Add-ins, Analyze Data.

Chart Tools ribbon options: Fill, Outline, Plot Area.

Context Menu options: Delete, Reset to Match Style, **Change Chart Type...**, Save as Template..., Select Data..., 3-D Rotation..., Format Plot Area...

Step 18: Select Pareto Chart, Press OK

The screenshot displays the Microsoft Excel interface. The 'Change Chart Type' dialog box is open, showing the 'All Charts' tab. The 'Pareto' chart type is selected and highlighted with a green box. A green arrow points to the 'Pareto' icon. The background shows a data table with the following columns: Name, Height(inches), Weight(pounds), and Age. A histogram chart titled 'Height Distribution' is visible on the right side of the screen.

	A	B	C	D
	Name	Height(inches)	Weight(pounds)	Age
1	Marie Brown	74	180	22.99
2	Amber Wright	74	215	34.69
3	Jessica Miller	72	210	30.78
4	Timothy Edwards	72	210	35.43
5	Martha Ruiz	73	188	35.71
6	Joshua Wright	69	176	29.39
7	Mark Ross	69	209	30.77
8	Stephanie Martinez	71	200	35.07
9	Kathleen Cox	76	231	30.19
10	Paul Gomez	71	180	27.05
11	Diane Martin	73	188	23.88
12	Mark Walker	73	180	26.96
13	Mark Roberts	74	185	23.29
14	Helen Castillo	74	160	26.11
15	Scott Howard	69	180	27.55
16	Patrick Cox	70	185	34.27
17	Richard Cruz	72	197	30
18	Steven Ramos	73	189	27.99
19	Kathleen Jimenez	75	185	22.38
20	Justin Gomez	78	219	22.89
21	Jeffrey Lewis	79	230	25.76
22	James Green	76	205	36.33
23	Gary Wood	74	230	31.17
24	Steven Gutierrez	76	195	32.31
25	Patricia Ruiz	72	180	31.03
26	Anna Scott	71	192	29.26
27	James Jackson	75	225	29.47

Step 19: Copy & Paste Chart

5. Histogram & Pareto Charts

File Home Insert Draw Page Layout Formulas Data Review View Developer Help Chart Design Format

Clipboard Font Alignment Number Styles Cells Editing Add-ins Analyze Data

Chart 20

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T																
1	Name	Height(inches)	Weight(pounds)	Age	Height Distribution								Height Distribution																							
2	Marie Brown	74	180	22.99																																
3	Amber Wright	74	215	34.69																																
4	Jessica Miller	72	210	30.78																																
5	Timothy Edwards	72	210	35.43																																
6	Martha Ruiz	73	188	35.71																																
7	Joshua Wright	69	176	29.39																																
8	Mark Ross	69	209	30.77																																
9	Stephanie Martinez	71	200	35.07																																
10	Kathleen Cox	76	231	30.19																																
11	Paul Gomez	71	180	27.05																																
12	Diane Martin	73	188	27.05																																
13	Mark Walker	73	180	27.05																																
14	Mark Roberts	74	185	23.2																																
15	Helen Castillo	74	160	26.11																																
16	Scott Howard	69	180	27.55																																
17	Patrick Cox	70	185	34.27																																
18	Richard Cruz	72	197	30																																
19	Steven Ramos	73	189	27.99																																
20	Kathleen Jimenez	75	185	22.38																																
21	Justin Gomez	78	219	22.89																																
22	Jeffrey Lewis	79	230	25.76																																
23	James Green	76	205	36.33																																
24	Gary Wood	74	230	31.17																																
25	Steven Gutierrez	76	195	32.31																																
26	Patricia Ruiz	72	180	31.03																																
27	Anna Scott	71	192	29.26																																
28	James Jackson	75	225	29.47																	Weight Distribution								Weight Distribution							

Histogram & Pareto Charts | Blank

Step 20: Change Chart Type

Microsoft Excel interface showing a spreadsheet with data and four charts. The 'Chart Design' ribbon is active, and the 'Change Chart Type...' option is highlighted in a context menu.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	Name	Height(inches)	Weight(pounds)	Age	Height Distribution								Height Distribution							
2	Marie Brown	74	180	22.99	[67, 68]								[73, 74]							
3	Amber Wright	74	215	34.69	[68, 69]								[72, 73]							
4	Jessica Miller	72	210	30.78	[69, 70]								[74, 75]							
5	Timothy Edwards	72	210	35.43	[70, 71]								[75, 76]							
6	Martha Ruiz	73	188	35.71	[71, 72]								[76, 77]							
7	Joshua Wright	69	176	29.39	[72, 73]								[77, 78]							
8	Mark Ross	69	209	30.77	[73, 74]								[78, 79]							
9	Stephanie Martinez	71	200	35.07	[74, 75]								[79, 80]							
10	Kathleen Cox	76	231	30.19	[75, 76]								[80, 81]							
11	Paul Gomez	71	180	27.05	[76, 77]								[81, 82]							
12	Diane Martin	73	188	23.88	[77, 78]															
13	Mark Walker	73	180	26.96																
14	Mark Roberts	74	185	23.29																
15	Helen Castillo	74	160	26.11																
16	Scott Howard	69	180	27.55																
17	Patrick Cox	70	185	34.27																
18	Richard Cruz	72	197	30																
19	Steven Ramos	73	189	27.99																
20	Kathleen Jimenez	75	185	22.38																
21	Justin Gomez	78	219	22.89																
22	Jeffrey Lewis	79	230	25.76																
23	James Green	76	205	36.33																
24	Gary Wood	74	230	31.17																
25	Steven Gutierrez	76	195	32.31																
26	Patricia Ruiz	72	180	31.03																
27	Anna Scott	71	192	29.26																
28	James Jackson	75	225	29.47																

The 'Change Chart Type...' option is highlighted in a green box in the context menu. The context menu also includes options like 'Delete', 'Reset to Match Style', 'Save as Template...', 'Select Data...', '3-D Rotation...', and 'Format Plot Area...'. The 'Fill' and 'Outline' options are also visible in the 'Format Plot Area' sub-menu.

Step 21: Select Pareto Chart, Press OK

The screenshot displays the Microsoft Excel interface. The 'Change Chart Type' dialog box is open, showing the 'All Charts' tab. The 'Pareto' chart type is selected and highlighted with a green box. A green arrow points to the 'Pareto' icon. The background spreadsheet contains the following data:

	A	B	C	D
	Name	Height(inches)	Weight(pounds)	Age
1	Marie Brown	74	180	22.99
2	Amber Wright	74	215	34.69
3	Jessica Miller	72	210	30.78
4	Timothy Edwards	72	210	35.43
5	Martha Ruiz	73	188	35.71
6	Joshua Wright	69	176	29.39
7	Mark Ross	69	209	30.77
8	Stephanie Martinez	71	200	35.07
9	Kathleen Cox	76	231	30.19
10	Paul Gomez	71	180	27.05
11	Diane Martin	73	188	23.88
12	Mark Walker	73	180	26.96
13	Mark Roberts	74	185	23.29
14	Helen Castillo	74	160	26.11
15	Scott Howard	69	180	27.55
16	Patrick Cox	70	185	34.27
17	Richard Cruz	72	197	30
18	Steven Ramos	73	189	27.99
19	Kathleen Jimenez	75	185	22.38
20	Justin Gomez	78	219	22.89
21	Jeffrey Lewis	79	230	25.76
22	James Green	76	205	36.33
23	Gary Wood	74	230	31.17
24	Steven Gutierrez	76	195	32.31
25	Patricia Ruiz	72	180	31.03
26	Anna Scott	71	192	29.26
27	James Jackson	75	225	29.47

The 'Change Chart Type' dialog box shows the following options:

- Recent
- Templates
- Column
- Line
- Pie
- Bar
- Area
- X Y (Scatter)
- Map
- Stock
- Surface
- Radar
- Treemap
- Sunburst
- Histogram**
- Box & Whisker
- Waterfall
- Funnel
- Combo

The 'Pareto' chart type is selected, and a preview of the 'Weight Distribution' Pareto chart is shown. The preview displays a bar chart with a cumulative percentage line. The x-axis labels are: (175, 176], (176, 177], (177, 178], (178, 179], (179, 180], (180, 181], (181, 182], (182, 183].

The background spreadsheet shows two charts: 'Height Distribution' and 'Weight Distribution'. The 'Height Distribution' chart is a bar chart with a cumulative percentage line. The x-axis labels are: (72, 73], (73, 74], (74, 75], (75, 76], (76, 77], (77, 78], (78, 79], (79, 80], (80, 81], (81, 82], (82, 83].

The 'Weight Distribution' chart is a bar chart with a cumulative percentage line. The x-axis labels are: (175, 176], (176, 177], (177, 178], (178, 179], (179, 180], (180, 181], (181, 182], (182, 183].

Step 22: Copy & Paste Chart

5. Histogram & Pareto Charts

File Home Insert Draw Page Layout Formulas Data Review View Developer Help Chart Design Format

Clipboard Font Alignment Number Styles Cells Editing Add-ins

Chart 21

	A	B	C	D
19	Steven Ramos	73	189	27.99
20	Kathleen Jimenez	75	185	22.38
21	Justin Gomez	78	219	22.89
22	Jeffrey Lewis	79	230	25.76
23	James Green	76	205	36.33
24	Gary Wood	74	230	31.17
25	Steven Gutierrez	76	195	32.31
26	Patricia Ruiz	72	180	31.03
27	Anna Scott	71	192	29.26
28	James Jackson	75	225	32.31
29	Dorothy Murphy	77	203	32.31
30	Gregory Bennett	74	195	35.67
31	Benjamin Roberts	73	182	25.89
32	Dennis Robinson	74	188	26.55
33	Amy Wright	78	200	24.17
34	Michelle Baker	73	180	26.69
35	Jane Cooper	75	200	25.13
36	Kathleen Patel	73	200	27.9
37	Raymond Clark	75	245	30.17
38	Melissa Garcia	75	240	31.36
39	Paul Sanders	74	215	30.99
40	Benjamin Hernandez	69	185	32.24
41	Brian Perez	71	175	27.61
42	Dorothy Williams	74	199	28.2
43	Anthony Thomas	73	200	28.85
44	Shirley Moore	73	215	24.21
45	Jennifer Gomez	76	200	22.02
46	Amber Hill	74	205	24.97

Age Distribution

Age Distribution

Step 23: Change Chart Type

Microsoft Excel interface showing a data table and three histograms. The 'Chart Design' tab is active, and the 'Change Chart Type...' option is highlighted in the context menu of the bottom-right histogram.

	A	B	C	D
19	Steven Ramos	73	189	27.99
20	Kathleen Jimenez	75	185	22.38
21	Justin Gomez	78	219	22.89
22	Jeffrey Lewis	79	230	25.76
23	James Green	76	205	36.33
24	Gary Wood	74	230	31.17
25	Steven Gutierrez	76	195	32.31
26	Patricia Ruiz	72	180	31.03
27	Anna Scott	71	192	29.26
28	James Jackson	75	225	29.47
29	Dorothy Murphy	77	203	32.46
30	Gregory Bennett	74	195	35.67
31	Benjamin Roberts	73	182	25.89
32	Dennis Robinson	74	188	26.55
33	Amy Wright	78	200	24.17
34	Michelle Baker	73	180	26.69
35	Jane Cooper	75	200	25.13
36	Kathleen Patel	73	200	27.9
37	Raymond Clark	75	245	30.17
38	Melissa Garcia	75	240	31.36
39	Paul Sanders	74	215	30.99
40	Benjamin Hernandez	69	185	32.24
41	Brian Perez	71	175	27.61
42	Dorothy Williams	74	199	28.2
43	Anthony Thomas	73	200	28.85
44	Shirley Moore	73	215	24.21
45	Jennifer Gomez	76	200	22.02
46	Amber Hill	74	205	24.97

Step 24: Select Pareto Chart, Press OK

The screenshot displays the Microsoft Excel interface. The 'Change Chart Type' dialog box is open, showing the 'All Charts' tab. The 'Pareto' chart type is selected and highlighted with a green box. A green arrow points to the 'Pareto' icon in the 'All Charts' tab. The background shows a data table with names and ages, and a partially visible Pareto chart.

	A	B	C	D
19	Steven Ramos	73	189	27.99
20	Kathleen Jimenez	75	185	22.38
21	Justin Gomez	78	219	22.89
22	Jeffrey Lewis	79	230	25.76
23	James Green	76	205	36.33
24	Gary Wood	74	230	31.17
25	Steven Gutierrez	76	195	32.31
26	Patricia Ruiz	72	180	31.03
27	Anna Scott	71	192	29.26
28	James Jackson	75	225	29.47
29	Dorothy Murphy	77	203	32.46
30	Gregory Bennett	74	195	35.67
31	Benjamin Roberts	73	182	25.89
32	Dennis Robinson	74	188	26.55
33	Amy Wright	78	200	24.17
34	Michelle Baker	73	180	26.69
35	Jane Cooper	75	200	25.13
36	Kathleen Patel	73	200	27.9
37	Raymond Clark	75	245	30.17
38	Melissa Garcia	75	240	31.36
39	Paul Sanders	74	215	30.99
40	Benjamin Hernandez	69	185	32.24
41	Brian Perez	71	175	27.61
42	Dorothy Williams	74	199	28.2
43	Anthony Thomas	73	200	28.85
44	Shirley Moore	73	215	24.21
45	Jennifer Gomez	76	200	22.02
46	Amber Hill	74	205	24.97

The 'Change Chart Type' dialog box shows the following options:

- Recent
- Templates
- Column
- Line
- Pie
- Bar
- Area
- X Y (Scatter)
- Map
- Stock
- Surface
- Radar
- Treemap
- Sunburst
- Histogram**
- Box & Whisker
- Waterfall
- Funnel
- Combo

The 'Pareto' chart type is selected and highlighted with a green box. A green arrow points to the 'Pareto' icon in the 'All Charts' tab. The background shows a data table with names and ages, and a partially visible Pareto chart.

Step 25: Completed

Microsoft Excel interface showing a completed histogram and Pareto chart for age distribution data.

Excel Ribbon: File, Home, Insert, Draw, Page Layout, Formulas, Data, Review, View, Developer, Help, Chart Design, Format. **Chart Design Tab:** AutoSum, Fill, Clear, Sort & Filter, Find & Select, Add-ins, Analyze Data.

Worksheet Data (Columns A-D):

Row	Name	Age	Count
19	Steven Ramos	73	189
20	Kathleen Jimenez	75	185
21	Justin Gomez	78	219
22	Jeffrey Lewis	79	230
23	James Green	76	205
24	Gary Wood	74	230
25	Steven Gutierrez	76	195
26	Patricia Ruiz	72	180
27	Anna Scott	71	192
28	James Jackson	75	225
29	Dorothy Murphy	77	203
30	Gregory Bennett	74	195
31	Benjamin Roberts	73	182
32	Dennis Robinson	74	188
33	Amy Wright	78	200
34	Michelle Baker	73	180
35	Jane Cooper	75	200
36	Kathleen Patel	73	200
37	Raymond Clark	75	245
38	Melissa Garcia	75	240
39	Paul Sanders	74	215
40	Benjamin Hernandez	69	185
41	Brian Perez	71	175
42	Dorothy Williams	74	199
43	Anthony Thomas	73	200
44	Shirley Moore	73	215
45	Jennifer Gomez	76	200
46	Amber Hill	74	205

Chart 1 (Top Left): Histogram showing age distribution with bins from [150, 160] to [280, 290].

Chart 2 (Top Right): Pareto chart showing cumulative distribution of age distribution with bins from [190, 200] to [280, 290].

Chart 3 (Bottom Left): Histogram titled "Age Distribution" showing age distribution with bins from [20.9, 22.9] to [46.9, 48.9].

Chart 4 (Bottom Right): Pareto chart titled "Age Distribution" showing cumulative distribution of age distribution with bins from [24.9, 26.9] to [44.9, 46.9].

Taskbar: Histogram & Pareto Charts, Blank.