



Index

• *Symbols and Numerics* •

& (ampersand), joining text items using, 148

' (apostrophe), ignored during sort, 78

* (asterisk)

as multiplication operator, 21

not allowed in worksheet names, 55

\ (backslash), not allowed in worksheet names, 55

\$ (dollar sign)

for absolute references, 62

specifying repeating rows and columns, 104

= (equal sign) for references, 61, 62

- (hyphen), ignored during sort, 78

/ (slash)

as division operator, 21

not allowed in worksheet names, 55

3-dimensional effects

AutoShapes, 50

charts, 94

• *A* •

absolute formulas, 26

absolute references, 62

Access

analyzing data with Excel, 191

copying data from Excel to, 186

exporting data to Excel, 192–193

importing data from Excel to, 187–189

linking a worksheet to a database, 190–191

Advanced Filter feature, 124–125

aligning data in cells, 15, 34

ampersand (&), joining text items using, 148

analyzing Access data with Excel, 191

annotating, text boxes for, 48

apostrophe ('), ignored during sort, 78

arranging windows, 70

arrows in worksheets, 47, 52

asterisk (*)

as multiplication operator, 21

not allowed in worksheet names, 55

auditing formulas, 30

AutoCorrect feature, 149, 150

AutoFill feature

copying formulas with, 25

for custom lists, 79

extending a data series with, 19

AutoFilter feature

customizing, 119, 122

finding multiple criteria, 123

overview, 119

secondary filter selection, 120

Top 10 option, 119, 121

- AutoFormats feature, 40, 132
- AutoOutline feature, 114
- AutoShapes feature, 49, 50, 52
- AutoSum button, 24
- average value, calculating, 24
- axes of charts
 - displaying or hiding, 90
 - formatting the Value axis, 95
 - labels for, 91
 - X or Category axis, defined, 86
 - Y or Value axis, defined, 87

• **B** •

- background color for cells, 44
- backslash (\), not allowed in worksheet names, 55
- bold type in this book, 1
- borders around cells, 45

• **C** •

- cascading windows, 70
- case
 - macro names and, 140
 - passwords and, 59
 - searching for data and, 81
- cell references. *See* references
- cells. *See also* data entry; formatting
 - adding borders, 45
 - aligning contents, 15, 34
 - background color for, 44
 - changing the active cell, 14
 - clearing formats, 46

- conditional formatting for, 46
- copying data to Access table, 186
- copying formatting, 40
- copying into PowerPoint slides, 180
- copying into Word, 172
- deleting data, 16
- editing data, 16
- finding, based on format, 82
- hyperlinks for, 63
- importing data to Access table, 187–189
- indenting data, 35
- inserting comments, 72
- inserting hyperlinks, 63
- merging data in, 148
- merging to create a title, 35
- naming a range, 18
- relocking, 58
- selecting multiple cells, 17
- unlocking, 58
- wrapping text in, 36

charts

- adding data series, 95
- adding data tables, 90, 93
- adding graphics, 87, 92
- adding titles and labels, 91
- basic, creating, 86
- changing location of, 93
- changing type for, 90
- Chart Wizard for, 88–90
- customizing the legend, 91
- deleting, 86–87
- deleting data series, 95
- dragging into PowerPoint slides, 181

- elements of, 86–87
- formatting the Value axis, 95
- inserting into PowerPoint slides, 182
- modifying attributes, 92
- organization, creating, 96
- overview, 85
- PivotCharts, 138
- printing, 105
- subtypes, 89
- 3-dimensional effects, 94
- types available, 88–89
- circular reference error, 29
- clearing. *See also* deleting or removing
 - conditional formatting, 48
 - print area, 101
 - selections, 17
- clip art, inserting, 51
- closing Excel or Excel workbooks, 6
- collapsing subtotal headings, 111
- college savings worksheet, 170
- colors
 - for arrows, 47
 - for AutoShape shadows, 49
 - background for cells, 44
 - for fonts, 44
 - for gridlines, 104
 - for worksheet tabs, changing, 56
- columns in worksheets
 - adjusting width, 38
 - freezing and unfreezing titles, 69
 - grouping and ungrouping, 115
 - hiding and unhiding, 57
 - merging data in, 148
 - printing headings, 104
 - repeating, 104
 - R1C1 style for, 74
 - splitting data into multiple columns, 147
- comments, 72, 74
- Commission Calculator worksheet
 - calculating commissions, 156–157
 - counting sales, 156
 - creating the commission table, 154
 - creating totals, 157
 - entering headings, 154
 - formatting, 158
 - overview, 153
 - protecting, 158
 - sales data input area, 155
 - totaling sales, 155
- comparing spreadsheets, 71
- compound formulas, 23
- conditional formatting, 46
- conventions in this book, 1
- converting merged cells into plain text, 148
- copying. *See also* inserting
 - absolute formulas, 26
 - cells into PowerPoint slides, 180
 - cells into Word, 172
 - charts into PowerPoint slides, 181
 - data, pasting and, 18
 - data to Access table, 186
 - formatting, 40
 - formulas with AutoFill, 25
 - subtotals, 113
 - values using Paste Special, 26
 - Word tables to Excel, 175
- worksheets, 55

- COUNTIF function, 156
- credit card payments worksheet, 169
- cropping images, 52
- customizing
 - AutoFilter feature, 119, 122
 - chart legend, 91
 - header or footer for printing, 103
 - lists, 79, 80
 - toolbars, 146
 - viewing options, 74

• D •

- data entry
 - alignment in cells and, 15
 - AutoFill for data series, 19
 - copying and pasting, 18
 - creating a data entry screen, 118
 - deleting cell data, 16
 - editing cell data, 16
 - primary types of data, 13
 - undoing, 16
 - validating data, 20
- data series in charts
 - adding a series, 95
 - adding graphics, 92
 - deleting, 95
 - overview, 87
- data tables for charts, 90, 93
- data validation
 - locating cells with, 19
 - in Medical Bill Tracker worksheet, 161
 - using, 20

- databases. *See also* Access; filtering data
 - creating a data entry screen for, 118
 - defined, 109
- dates
 - entering in cells, 15
 - formatting, 37
 - sorting by, 80
 - validating, 20
- decimals
 - alignment of data and, 15
 - formatting, 34
- deleting or removing. *See also* hiding
 - arrows, 48
 - AutoCorrect entries, 149
 - AutoOutline, 114
 - AutoShapes, 49
 - cell data, 16
 - cell formats, 46
 - charts, 86–87
 - clearing conditional formatting, 48
 - clearing print area, 101
 - clearing selections, 17
 - comments, 72
 - custom lists, 79
 - data series in charts, 95
 - existing Excel file, 8
 - graphics, 52
 - hyperlinks, 63
 - macros, 144
 - PivotCharts, 138
 - PivotTable fields, 131, 137
 - PowerPoint slide elements, 180
 - separate PivotTables, 133

- subtotals, 113
- text boxes, 48
- ungrouping items, 115
- Word table columns or rows, 172
- Word tables, 172, 173, 174
- worksheets, 54
- worksheets embedded into Word, 174
- digital signatures for macros, 141
- displaying. *See* viewing or displaying
- DIV/0! error, 29
- dollar sign (\$)
 - for absolute references, 62
 - specifying repeating rows and columns, 104
- drawing AutoShapes, 49
- DREAM HOUSE worksheet, 168

● **E** ●

- editing
 - cell data, 16
 - cells copied into Word, 172
 - comments, 72
 - custom lists, 79
 - formulas, 25
 - tables in PowerPoint slides, 180
 - worksheets inserted into Word, 173
- e-mail
 - attaching workbook to, 105
 - hyperlinks for, 63
- embedding worksheets into Word, 174
- entering data. *See* data entry
- equal sign (=) for references, 61, 62
- error checking for formulas, 149

- error messages for formulas, 29
- exporting Access data to Excel, 192–193

● **F** ●

- files
 - deleting, 8
 - hyperlinks for, 63
 - opening an existing Excel file, 8
 - opening in different formats, 12
 - password-protecting, 60
 - saving as templates, 73, 166
 - saving in different formats, 12
 - searching by properties for, 12
- filtering data
 - advanced filtering, 124–125
 - AutoFilter for, 119–123
 - for blanks in selected field, 119
 - customizing AutoFilter, 119, 122
 - for data (NonBlanks) in selected field, 119
 - finding multiple criteria, 123
 - overview, 117
 - secondary filter selection, 120
 - Top 10 option, 119, 120
- financial planning worksheets
 - OUR DREAM HOUSE, 168
 - OUR SAVINGS GOALS, 170
 - overview, 167
 - PAY OFF CREDIT CARD, 169
- finding. *See also* filtering data
 - all data occurrences, 82
 - cells based on format, 82
 - cells with data validation, 19

- finding (*continued*)
 - clip art, 51
 - data containing a word or value, 81
 - files by properties, 12
 - and replacing data, 83
 - tracing formula dependents, 30
- fonts, 36, 44
- footers, 102–103
- form letter in Word using Excel list, 176–178
- formatting. *See also* colors
 - aligning data, 34
 - arrow styles, 47
 - AutoFormat feature for, 40, 132
 - cell borders, 45
 - column width, 38
 - Commission Calculator worksheet, 158
 - conditional, 46
 - copying, 40
 - dates, 37
 - finding cells based on format, 82
 - font attributes, 36
 - indenting data in cells, 35
 - Medical Bill Tracker worksheet, 162
 - merging cells to create a title, 35
 - PivotCharts, limitations on, 138
 - PivotTable values and text, 134
 - PivotTables using AutoFormat, 132
 - replacing data and, 83
 - rotating text, 37
 - row height, 39
 - styles for, 41
 - text boxes, 48
 - Value axis of chart, 95
 - values, 34
 - wrapping text in a cell, 36
- formulas. *See also* functions
 - absolute, defining, 26
 - adding to PivotTables, 137
 - amount due calculation, 161
 - auditing, 30
 - AutoSum button for adding numbers, 24
 - for average value, 24
 - commission calculation, 156–157
 - in Commission Calculator worksheet, 155–157
 - compound, creating, 23
 - copying with AutoFill, 25
 - counting sales, 156
 - editing, 25
 - error checking for, 149
 - Function Wizard for building, 27
 - hidden rows or columns and, 57
 - IF statements for, 28, 156–157
 - in Medical Bill Tracker worksheet, 160–161, 164–165
 - merging data in columns, 148
 - in OUR DREAM HOUSE worksheet, 168
 - in OUR SAVINGS GOALS worksheet, 170
 - overview, 21
 - in PAY OFF CREDIT CARD worksheet, 169
 - payment calculation, 168, 169
 - references in, 61, 62
 - savings calculation, 170
 - simple, creating with operators, 21
 - totaling, 155, 157, 161, 164–165
 - troubleshooting errors, 29
- freezing titles, 69

full screen view, 71
 Function Wizard, 27
 functions. *See also* formulas; *specific functions*
 arguments list for, 168
 changing in PivotTables, 132
 in Commission Calculator worksheet, 155–157
 for hyperlinks, 63
 inserting, 27
 in Medical Bill Tracker worksheet, 160–161, 164–165
 merging data in columns, 148
 in OUR DREAM HOUSE worksheet, 168
 in OUR SAVINGS GOALS worksheet, 170
 overview, 21
 in PAY OFF CREDIT CARD worksheet, 169

● G ●

graphics
 adding to charts, 87, 92
 arrows, 47
 AutoShapes, 49
 clip art, 51
 customizing viewing options, 74
 inserting hyperlinks, 63
 inserting saved images, 50
 manipulating, 52
 shadows for AutoShapes, 49
 text boxes, 48
 3-dimensional, 50
 graphs. *See* charts
 gridlines
 of charts, 87, 90, 92
 colors, 104

printing, 104
 showing or hiding in worksheets, 74
 grouping
 PivotTable data, 136
 rows or columns (outline groups), 115

● H ●

headers, 102–103
 headings
 collapsing and expanding for subtotals, 111
 for Commission Calculator worksheet, 154
 for Medical Bill Tracker worksheet, 160
 printing, 104
 height of rows
 adjusting, 39
 hidden rows, 57
 hiding. *See also* viewing or displaying
 cell comments, 72
 collapsing subtotal headings, 111
 customizing viewing options, 74
 grand totals from PivotTable display, 132
 Office Assistant, 9
 open workbooks, 70
 outlines, 114
 PivotTable data, 131
 rows or columns, 57
 toolbars, 10
 worksheets, 56
 house payments worksheet, 168
 hyperlinks, 63
 hyphen (-), ignored during sort, 78

• I •

- icons for SmartTags, 150
- IF statements
 - creating formulas using, 28
 - nested, for calculating commissions, 156–157
- images. *See* graphics
- importing Excel data to Access table, 187–189
- indenting data in cells, 35
- inserting. *See also* copying; data entry
 - arrows, 47
 - AutoCorrect entries, 149
 - cell comments, 72
 - clip art, 51
 - functions, 27
 - hyperlinks, 63
 - images, 50
 - special characters, 146
 - text boxes, 48
 - Word table columns or rows, 172
 - worksheets into Word, 173
 - worksheets into workbooks, 54
 - worksheets or charts into PowerPoint slides, 182

• L •

- labels (mailing) in Word using Excel list, 178
- labels on charts
 - adding, 91
 - Category label, 86
 - options for, 90
 - Value label, 87
- labels on spreadsheets, 13, 15

- Landscape printing orientation, 101
- legend of charts, 87, 90, 91
- linking worksheets
 - to Access database, 190–191
 - hyperlinks for, 63
 - into PowerPoint slides, 183
- lists
 - creating custom, 79
 - sorting custom, 80
 - Word mail merge form letter using, 176–178
 - Word mailing labels using, 178

• M •

- macros
 - assigning shortcut keys to, 142
 - creating a toolbar button for, 143
 - defined, 139
 - deleting, 144
 - digital signatures for, 141
 - locations for storing, 140
 - making available whenever you use Excel, 140
 - naming, 140
 - overview, 139
 - preventing from running when Excel starts, 143
 - recording, 139, 140
 - running, 139, 142
 - security for, 139, 141
 - stopping, 143
 - undoing not possible for, 142
- mail merge form letter in Word using Excel list, 176–178
- mailing labels in Word using Excel list, 178

margins, setting for printing, 102
 Medical Bill Tracker worksheet
 calculating amount due, 161
 creating totaling formulas, 160
 duplicating the worksheet for family members, 163
 entering headings, 160
 formatting, 162
 overview, 159
 print settings, 162
 protecting, 163
 saving as a template, 166
 specifying data validation, 161
 totaling formulas for, 160
 totals worksheet, 164–165
 menus
 conventions in this book, 1
 displaying all choices, 10
 merging
 cells to create a title, 35
 data in columns, 148
 moving items
 charts, 93
 graphics, 52
 Office Assistant, 9



NAME# error, 29
 names
 for macros, 140
 for PivotTable formulas, 137
 for range of cells, 18

renaming PivotTable fields, 134
 renaming worksheets, 55
 rules for worksheets, 55
 NPV function, 169



Office Assistant, 6, 9
 opening
 Excel, 6
 existing Excel file, 8
 files in different formats, 12
 new, blank workbook, 7
 preventing macros from running when opening Excel, 143
 templates, 73
 operators
 creating simple formulas with, 21
 in PivotTable formulas, 137
 Rule of Priorities, 23
 organization charts, creating, 96
 orientation for printing, 101
 OUR DREAM HOUSE worksheet, 168
 OUR SAVINGS GOALS worksheet, 170
 outlines
 AutoOutline feature, 114
 collapsing and expanding subtotal headings, 111
 controlling individual subtotals, 111
 copying subtotals, 113
 creating multiple subtotals, 112
 forming groups, 115
 generating subtotals, 110
 hiding, 114

outlines (*continued*)

- overview, 109
- removing items from a group, 115
- removing subtotals, 113

● *p* ●

page breaks

- adding manually, 100
- between subtotal groups, 110

page fields for PivotTables, 133

Page Setup dialog box, 101–104, 162

pages of PivotTables, 130

paper size and orientation for printing, 101

passwords

- for files, 60
- for protected worksheets, 59

Paste Special, copying values using, 26

PAY OFF CREDIT CARD worksheet, 169

payment worksheets. *See* financial planning worksheets

percent of totals, calculating in PivotTables, 136

Personal Workbook

- deleting macros from, 144
- storing macros in, 140

pictures. *See* graphics

PivotCharts, 138

PivotTable and PivotChart Wizard, 129

PivotTables

- adding your own calculations, 137
- AutoFormats for, 132
- calculating percent of totals, 136
- changing the calculation type, 132

creating, 128–130

creating PivotCharts from, 138

data source for, 129

deleting separate PivotTables, 133

displaying details for data, 131

elements of, 129–130

formatting values and text, 134

generating multilevel totals, 135

generating separate PivotTables, 133

grouping data, 136

hiding data, 131

organizing data for, 128

overview, 127

page fields, 133

removing calculated fields, 137

removing grand totals from display, 132

removing unwanted fields, 131

renaming fields, 134

updating (refreshing data), 131

plot area of charts, 87

PMT function, 168, 170

Portrait printing orientation, 101

PowerPoint slides

copying cells into, 180

deleting tables in, 180

dragging charts into, 181

editing tables in, 180

inserting worksheets or charts into, 182

linking worksheets into, 183

previewing before printing, 99

printing

adding page breaks manually for, 100

charts, 105

checking spelling before, 97, 98
 clearing the print area, 101
 fitting worksheets on the page, 101
 gridlines, 104
 header or footer, 102–103
 headings for rows and columns, 104
 Page Setup dialog box for, 101–104
 paper size and orientation for, 101
 previewing before, 99
 repeating rows and columns, 104
 selected area, 100
 setting margins for, 102
 settings for Medical Bill Tracker worksheet, 162
 specifying the print area, 100
 worksheets or workbooks, 105
 properties
 searching for files by, 12
 specifying for workbooks, 11
 protection. *See* security

• R •

ranges of cells, naming, 18
 recording macros, 139, 140
 references
 absolute, 62
 to another cell in the same worksheet, 62
 to another worksheet, generating, 61
 cross-referencing other workbooks, 62
 including in formulas, 61
 recording macros and, 140
 R1C1 style for, 74

refreshing data. *See* updating
 relocking cells, 58
 removing. *See* deleting or removing
 renaming. *See* names
 repeating rows and columns, 104
 replacing data with Find and Replace, 83
 resizing
 column width in PowerPoint slides, 180
 column width in Word tables, 172
 column width in worksheets, 38
 graphics, 52
 row height in worksheets, 39
 split window sections, 68
 tables in Word, 173, 174
 worksheets embedded into Word, 174
 retirement savings worksheet, 170
 R1C1 reference style, 74
 rotating
 AutoShapes or arrows, 52
 text, 37
 rows in worksheets
 adjusting height, 39
 freezing and unfreezing titles, 69
 grouping and ungrouping, 115
 hiding and unhiding, 57
 printing headings, 104
 repeating, 104
 Rule of Priorities, 23
 running macros, 139, 142

● S ●

saving

- files in different formats, 12
- workbook as template, 73, 166
- workbook properties, 11
- workbooks, 7
- worksheets into Word, 173

savings calculation worksheet, 170

SAVINGS GOALS worksheet, 170

scientific notation, values displayed as, 15

screen. *See* windows

searching. *See* finding

security

- for macros, 139, 141
- password-protecting files, 60
- protecting the Commission Calculator worksheet, 158
- protecting the Medical Bill Tracker worksheet, 163
- protecting worksheets, 59
- relocking cells, 58
- unlocking cells, 58
- unprotecting worksheets, 59

selecting

- active cell, 14
- cells with data validation, 19
- clearing a selection, 17
- multiple cells, 17
- PivotTable data to show, 131

shading cells, 44

shadows for AutoShapes, 49

shortcut keys, assigning to macros, 142

showing. *See* viewing or displaying

slash (/)

- as division operator, 21
- not allowed in worksheet names, 55

SmartTags feature, 150

sorting data

- custom lists, 79
- by day or month, 80
- by multiple criteria, 78
- for multiple subtotals, 112
- Sort command for, 77
- toolbar buttons for, 76
- before using subtotals, 109, 110

sounds for SmartTags, 150

special characters, inserting, 146

spell check, 97, 98

splitting

- data into multiple columns, 147
- Excel screen, 68
- outline groups, 115

spreadsheets. *See* worksheets

stopping macros, 143

styles for formatting, 41

subtotals

- AutoOutline feature, 114
- collapsing and expanding headings, 111
- controlling individually, 111
- copying, 113
- generating, 110
- generating in PivotTables, 135
- multiple, creating, 112
- page breaks between groups, 110
- removing, 113
- sorting before using, 109, 110

SUM function, 157, 160–161, 164–165

SUMIF function, 155, 164–165

symbols, inserting, 146

• T •

templates, 73, 166

text. *See also* cells; data entry; formatting

adding to AutoShapes, 49

annotating with text boxes, 48

cell comments, 72

fonts, 36, 44

joining using ampersand, 148

rotating, 37

wrapping in cells, 36

text boxes, 48

3-dimensional effects

AutoShapes, 50

charts, 94

tick marks, 87

tiling windows, 70

titles

of charts, 86, 90, 91

freezing and unfreezing, 69

merging cells to create, 35

toolbars

creating buttons for macros, 143

creating custom, 146

described, 6

displaying or hiding, 10, 76

showing on two rows, 10

tracking medical expenses. *See* Medical Bill

Tracker worksheet

troubleshooting formula errors, 29

• U •

undoing

data entry, 16

generating separate PivotTables and, 133

macros and, 142

unfreezing titles, 69

ungrouping rows or columns, 115

unhiding

Personal Workbook, 144

rows or columns, 57

worksheets, 56

unlocking cells, 58

unprotecting worksheets, 59

updating (refreshing data)

PivotTables, 131

worksheets linked into PowerPoint slides, 183

• V •

validating data. *See* data validation

#VALUE! error, 29

values

alignment in cells, 15

copying using Paste Special, 26

defined, 13

entering in cells, 15

formatting in PivotTables, 134

formatting in spreadsheets, 34

viewing or displaying. *See also* filtering data;

finding; hiding

all menu choices, 10

arranging windows, 70

cell comments, 72

- viewing or displaying (*continued*)
 - comparing spreadsheets, 71
 - customizing viewing options, 74
 - full screen view, 71
 - PivotTable data details, 131
 - previewing before printing, 99
 - R1C1 reference style, 74
 - splitting the Excel screen, 68
 - subtotal headings, collapsing
 - and expanding, 111
 - toolbars, 10, 76
 - toolbars on two rows, 10
 - tracing formula dependents, 30
 - unhiding rows or columns, 57
 - unhiding worksheets, 56
 - zooming in or out, 68

● W ●

- Web sites, hyperlinks for, 63
- width of columns
 - adjusting in worksheets, 38
 - hidden columns, 57
 - in PowerPoint slides, 180
 - in Word tables, 172
- windows
 - arranging, 70
 - customizing viewing options, 74
 - full screen view, 71
 - splitting the screen, 68
- Word
 - copying cells into, 172
 - copying tables to Excel, 175

- creating mail merge form letter using Excel list, 176–178
- creating mailing labels using Excel list, 178
- deleting tables, 172, 173, 174
- editing inserted cells, 172
- editing inserted worksheets, 173
- embedding worksheets into, 174
- resizing tables, 173, 174
- saving worksheets into, 173
- workbooks
 - attaching to e-mail, 105
 - automatic prompt for setting properties, 11
 - changing worksheet tab colors, 56
 - closing, 6
 - comparing side by side, 71
 - creating new, 7
 - cross-referencing other workbooks, 62
 - default worksheets in, 53
 - defined, 53
 - hiding an open workbook, 70
 - inserting worksheets, 54
 - maximum worksheets per workbook, 53
 - printing, 105
 - saving, 7
 - saving worksheets into Word, 173
 - specifying properties, 11
- worksheets
 - attaching to e-mail, 105
 - changing tab colors, 56
 - comparing side by side, 71
 - copying, 55
 - copying data to Access table, 186
 - default number created, 53

defined, 53
deleting, 54
embedding into Word, 174
fitting on the page, 101
hiding and unhiding, 56
importing data to Access table, 187–189
inserting, 54
inserting into PowerPoint slides, 182
linking into PowerPoint slides, 183
linking to Access database, 190–191
maximum number per workbook, 53
moving between, 14
printing, 105

protecting, 59
referencing another worksheet, 61
renaming, 55
rules for naming, 55
saving into Word, 173
splitting data into multiple columns, 147
unprotecting, 59
wrapping text in cells, 36



zooming in or out, 68

