SYMBOLS

' (apostrophe), 271
* (asterisk), 85, 210

A

Access (Microsoft)
database password, 211
exporting PivotTables forms to Excel, 242–243
tables, 206, 210–211
accessing external data, 207
Accounting format, 100
Add Columns dialog box, 198
Add Criteria dialog box, 200–201
Add Tables dialog box, 194, 196
add-ins (OLAP), 253
Advanced Text Import Settings dialog box, 217
analysis
break-even, 3, 280
data, 2–3, 281
relationship with PivotTables, 9
trend, 9
what-if, 3, 262–263, 283
apostrophe (‘), 271
arguments
defined, 3, 280
optional, 179, 282
overview, 179
required, 179, 180, 182, 283
arithmetic formulas, 176, 280
asterisk (*), 85, 210
AutoFilter feature, 15
AutoFormat feature, 280
Automatic Subtotals feature, 15
AutoSort feature, 60–61, 65
Average calculation, 148

B

background query, 280
base field, 150, 280
base item, 150
break-even analysis, 3, 280

calculated fields, 162–165, 280
Calculated Item Solve Order dialog box, 170–171

calculated items
changing solve order of, 170–171
as custom calculation type, 162, 166–167
defined, 280
limitations of, 163
calculations. See custom calculations; summary
calculations; specific types
category area, 112, 280
category axis, 13
category field, 12, 55, 117, 121, 280
category item, 13
cells, 3, 98–99, 144–145, 281
Change Chart Type dialog box, 122–123
Change PivotTable Data Source dialog box, 22–23
chart categories (X-axis), 12
chart data series, 12
chart values (Y-axis), 12
charts. See PivotCharts
Choose Data Source dialog box
creating
OLAP cube data sources, 248, 251
PivotTables from external data, 233–234
PivotTables from OLAP cubes, 252
defining data sources, 190, 192–193
starting Microsoft Query, 194
Classic layout, 38–39, 57
column areas
adding fields to, 40–41
compared with series area, 112
overview, 10, 280
column break lines, 216
column chart, clustered, 117
column fields
defined, 10, 280
hiding items in, 82–83
selecting, 26
showing hidden items in, 86–87
sorting, 60
column items, 62–63, 78–79
Comma Separated Values (CSV), 214, 280
Compact layout, 59
comparison formulas, 177, 280
computer, locking, 241
conditional formatting, 104–105, 280
Connection Properties dialog box
editing queries, 205, 217
importing data from Access tables, 211
refreshing
imported data, 225
PivotTables, 238–239
saving passwords, 240–241
Consolidate dialog box, 227
consolidation ranges, 226–229
constants, 174, 280
Count calculation, 148
Count Numbers calculation, 148
Create Cube File Wizard, 266–267
Create Digital Certificate dialog box, 275
Create New Data Source dialog box, 190–191, 248, 249, 251
Create PivotTable dialog box, 18, 20
Create PivotTable with PivotChart dialog box, 116
Create Table dialog box, 16–17
criteria, 4, 200, 280
Criteria pane (Microsoft Query), 195
CSV (Comma Separated Values), 214, 280
Currency format, 100
custom calculations
  deleting, 173
  editing, 168–169
  inserting
    fields, 164–165
    items, 166–167
  limitations of, 163
  listing, 172
  overview, 162, 280

data
  analysis, 2–3, 281
  defined, 2, 11, 280
  external
    accessing, 207
    creating PivotTables from, 232–235
    defined, 11, 206, 281
    importing, 207
    refreshing PivotTables that use, 238–239
  types of, 206
  external connections, saving passwords with, 240–241
  fixed-width, 216
  importing
    from Access tables, 210–211
    from data sources, 208–209
    delimited, 215
    overview, 2
    from text files, 214–217
    from Web pages, 218–219
    from Word tables, 212–213
    from XML files, 220–221

PivotTables
  applying conditional format to, 104–105
  applying numeric format to, 100–101
  converting to regular, 50–51
  creating charts from, 34–37
  displaying details behind, 32–33
  refreshing, 30–31
  refreshing, 30–31, 224–225
  showing items with no, 106–107
  sorting with AutoSort, 60–61
  tabular, 8
  transactional, 8
  worksheet, 14–15
data area
  adding fields to, 42–43
  overview, 10, 13, 281
data connection files, 208, 281
data fields
  formatting, 156–157
  overview, 10, 281
  sorting, 61
data grids, 199
data labels, 123
Data Link Properties dialog box, 210
data models, 3, 281
data series, 13, 124, 125
data sources. See also Microsoft Query
  creating, 209
  defined, 281
  defining, 190–193
  files as external data type, 206
  importing data from, 208–209
  OLAP cube, 248–251
  Open Database Connectivity (ODBC), 188, 282
  renaming, 193
data tables, 3, 130–131, 281
data warehouse, 246, 281
database query, 188
date format, 102–103, 187
date values, grouping, 66–67
delimited text file, 281
difference summary calculations, 150–151
Digital Certificate dialog box, 276–277
digital certificates, 275, 276–277
dimensions, 246, 254–255, 281
direct reference, 175
drill down view, 32, 281
drop area, 11, 281
drop zones, 38
INDEX

E

Edit Columns dialog box, 199
Edit Connection dialog box, 223
Edit Criteria dialog box, 201
elements, 221
embedding PivotCharts, 114–115
Excel (Microsoft)
  Consolidate feature, 227
  exporting PivotTable forms to, 242–243
  layouts, 39, 56
  ranges, 20–21
  running macros from, 272–273
  tables, 18–19
Excel Options dialog box, 27, 274
Existing Connections dialog box, 208, 211, 223
Extensible Markup Language (XML), 206, 220–221, 283
external data
  accessing, 207
  connections, 240–241
  creating PivotTables from, 232–235
  defined, 11, 206, 281
  importing, 207
  refreshing PivotTables that use, 238–239
  types of, 206
External Data Refresh Status dialog box, 224

F

fact table, 246, 281
Field Settings dialog box
  adding subtotals, 69
  changing PivotTable summary calculations, 149
  disabling subtotals for fields, 159
  displaying subtotals for fields, 161
  renaming PivotTable fields, 95
  repeating item labels in fields, 110
  showing items, 110
fields. See also column fields; PivotTables, fields; row fields
  adding
    to data area, 42–43
    in PivotCharts, 112
    to queries, 198–199
    Report Filter, 44–45, 75
    to row/column areas, 40–41
  base, 150, 280
  calculated, 162–165, 280
  category, 12, 55, 117, 121, 280
  changing order of, 56–58
data, 281
  defined, 196, 281
  deleting from data grids, 199
  disabling subtotals for, 158–159
  displaying subtotals for, 160–161
  editing, 199
  inner, 11, 40, 281, 282
  moving to different areas, 54–55
  outer, 11, 40, 282
  pivoting, 112
  removing, 21, 112, 221
  repeating item labels in, 110–111
  selecting for queries, 188
  series, 117, 122, 124, 128–129, 283
files
  cube, 250–251
  data connection, 208, 281
  data source, 206
  text, 206, 214–217, 281
  XML, 220–221
filters, 79, 80–81
financial functions, 181
fixed-width data, 216
fixed-width text file, 281
fixed-width text structure, 214
formats
  date and time, 102–103, 187
  numeric, 100
  row-and-column, 14
formulas
  arithmetic, 176, 280
  building, 184–185
  comparison, 177, 280
  overview, 3, 174–175, 281
  using PivotTable values in, 245
Fraction format, 100
Function Arguments dialog box, 183
functions
  advantages of, 178
  building, 182–183
  defined, 3, 178, 281
  financial, 181
  logical, 181
  mathematical, 180
  statistical, 180–181
structure of, 179
worksheet, 111, 174, 178

G
Grand Totals, 140–141, 281
group details, 70, 71
Grouping dialog box, 64–67

I
Import Data dialog box
creating PivotTables from OLAP cubes, 253
importing data
from Access tables, 211
for data sources, 209
from text files, 217
from Web pages, 218–219
from XML files, 221
returning query results, 204
Import Text File dialog box, 214, 217, 225
Index summary calculations, 156–157
in-grid drop zones, 38
inner field, 11, 40, 281, 292
input cells, 3, 281
Insert Calculated Field dialog box, 164–165, 168, 173,
182, 184
Insert Calculated Item dialog box, 166–167, 169, 175,
182, 184
Insert Chart dialog box, 115
Insert Function dialog box, 179, 183
Insert Pivot dialog box, 237
Insert Slicers dialog box, 88
intranet, 218
items
calculated
changing solve order of, 170–171
custom, 162, 166–167
limitations of, 163
overview, 280
defined, 281
displaying in PivotCharts, 120–121
excluding from Report filters, 108–109
including in PivotTable totals, 260–261
labels, 142–143
phantom field, 107, 283
PivotTable, 26–27, 96–97, 175
repeating labels in fields, 110–111
report filter, 258–259
showing with no data, 106–107

J
Joins dialog box, 197

L
label filters, 79
labels, 11, 14, 27, 123, 282
layouts
Classic PivotTable, 38–39, 57
Compact, 59
Excel, 56
Outline, 58
report, 58–59
tabular report, 58
legends, 128–129
levels, 254–255, 256, 257, 282
list, defined, 282
location of external data, 207
locking computers, 241
logical functions, 181
Login dialog box, 232, 235, 239, 241
login to external data, 207

M
Macro dialog box, 273, 278
Macro Options dialog box, 279
macros
adding to modules, 270–271
assigning shortcut keys to, 278–279
running, 272–273
security, 274–277
mathematical functions, 180
Max calculation, 148
measure, 246, 282
median, 178
members, 257, 282
merging item labels, 142–143
method, defined, 282
Microsoft Access. See Access (Microsoft)
Microsoft Developer Network (MSDN) Web site, 277
Microsoft Download Center Web site, 222
Microsoft Excel. See Excel (Microsoft)
Microsoft Query. See also data sources
overview, 189
saving queries with, 205
starting, 194
troubleshooting, 194
window, 195
Microsoft Word tables, 206, 212–213
Microsoft’s SQL Server database system, 191
Min calculation, 148
mode, 178
Modify PivotTable Quick Style dialog box, 135
modules, 268, 270–271, 282
Move Chart dialog box, 118–119
MSDN (Microsoft Developer Network) Web site, 277
Multidimensional Connection dialog box, 248–249
multidimensional data, 246, 266, 282. See also OLAP (Online Analytical Processing)

New Formatting Rule dialog box, 104–105
New PivotTable Quick Style dialog box, 134–135
New Web Query dialog box, 218–219, 219
numeric formats, 100, 186–187

object, defined, 282
object model, defined, 282
ODBC Data Source Administrator dialog box, 193
ODBC (Open Database Connectivity) data source, 188, 282
.odc extension, 208
Offline OLAP Settings dialog box, 265–267
OLAP Cube Wizard, 249
OLAP cubes
creating offline, 264–267
defined, 282
file, 282
overview, 246
OLAP (Online Analytical Processing)
creating
cube data sources, 248–251
offline OLAP cubes, 264–267
PivotTables from OLAP cubes, 252–253
displaying
multiple report filter items, 258–259
selected levels and members, 257
hiding
details for dimensions and levels, 254–255
levels, 256
including hidden items in PivotTable totals, 260–261
overview, 246–247, 282
performing what-if analysis on PivotTables, 262–263
PivotTable limitations, 247
showing details for dimensions and levels, 254
Open Database Connectivity (ODBC) data source, 188, 282
Open dialog box, 222, 250
Open Query dialog box, 205
operands, 3, 162, 174–175, 282
operator precedence, 177, 185, 282
operators, 3, 162, 175, 282
optional argument, 179, 282
outer field, 11, 40, 282
Outline layout, 58

parameter, defined, 282
passwords, 211, 240–241
Paste Special dialog box, 213
percentage calculations, 152–153
Percentage format, 100
Personal Macro Workbook, 269
phantom field item, 107, 283
pivot, 11, 283
pivot cache, 11, 35, 233, 283
PivotChart Wizard, 227
PivotCharts
adding
fields, 112
titles to, 126–127
changing type of, 122–123
compared with PivotTables, 112
concepts, 12–13
creating
beside PivotTables, 114–115
from Excel tables, 116–117
from PivotTables, 113
data table, 130
defined, 112
displaying data tables with, 130–131
embedding, 114–115
features, 13
filtering, 120–121
limitations of, 112
moving
legends, 128–129
to other sheets, 118–119
sorting, 124–125
pivoting, 54, 112
PivotTable Connections dialog box, 93
PivotTable Options dialog box
- changing report filter layout, 76–77
- disabling Grand Totals, 140–141
  - enabling
    - classic layout, 38–39
    - details, 33
    - including hidden items in totals, 261
    - merging item labels, 143
    - preserving formatting, 136–137
    - refreshing PivotTable options, 31
    - renaming PivotTables, 138–139
    - resizing workbooks, 244
  - specifying characters for errors and empty cells, 144
PivotTables
- applying Quick Styles, 132–133
- benefits of, 6–7
- cells, 98–99
- compared with PivotCharts, 112
- connecting, 90–93
- converting to regular data, 50–51
- creating
  - custom Quick Styles, 134–135
  - from Excel ranges, 20–21
  - from Excel tables, 18–19
  - from existing PivotTables, 22–23, 230–231
  - from external data, 232–235
  - from multiple consolidation ranges, 226–229
  - PivotCharts, 113–115
  - PivotTables from, 252–253
  - with PowerPivot, 236–237
  - preparing worksheet data, 14–15
  - snapshots of, 51
  - tables for reports, 16–17
  - data
    - applying format to, 100–105
    - creating charts from, 34–37
    - displaying details behind, 32–33
    - refreshing, 30–31
- deleting, 52–53
- exporting forms to Excel, 242–243
- features, 10–11
- Field List, 24–25
- fields
  - overview, 174
  - removing, 28–29
  - renaming, 94–95
  - terminology, 11
  - uses for, 5
  - when to use, 8–9
- filtering with Slicer feature, 88–89
- importing to, 207
items
- including in totals, 260–261
- overview, 175
- renaming, 96–97
- selecting, 26–27
layouts
- classic, 38–39, 57
- Excel, 39
- limitations of, 5
- OLAP, 247
- overview, 4–5
- performing what-if analysis on, 262–263
- preserving formatting, 136–137
- protecting, 146–147
- publishing to Web pages, 46–49
- recalculating, 263
- refreshing, 238–239
- renaming, 138–139
- resizing
  - pivot cache, 233
  - workbooks, 244
- summary calculations, 148–149
values
- filtering, 80–81
- using in formulas, 245
view, changing
- grouping values, 64–69
- hiding group details, 70
- moving fields to different areas, 54–55
- moving row/column items, 62–63
- order of fields within areas, 56–58
- report layouts, 58–59
- showing group details, 71
- sorting data with AutoSort, 60–61
- ungrouping values, 72–73
position reference, 175
PowerPivot, 222–223, 236–237. See also slicers
precedence (operator), 177, 185, 282
Problems During Load dialog box, 243
Product calculation, 148
property, 283
Protect Sheet dialog box, 146–147
Publish As Web Page dialog box, 47–49
queries. See also Microsoft Query
- adding
  - fields to, 198–199
  - tables to, 196–197
INDEX

criteria, 189, 200–201
database, 188
defined, 283
removing tables from, 197
returning results, 204–205
saving with Microsoft Query, 205
selecting tables and fields for, 188
sorting records, 202–203
Query Results (Microsoft Query), 195
Query Window (Microsoft Query), 195
Quick Access toolbar, customizing, 27
Quick Styles, 132–135

R

Range dialog box, 23
RDBMS (relational database management system), 232
Record Macro dialog box, 269
records
adding to tables, 17
defined, 196, 283
filtering, 188, 200–201
query, sorting, 202–203
sorting, 188
reference (direct/positional), 175
relational database management system (RDBMS), 232
report filter
adding fields, 44–45, 75
applying, 74–75
area, 283
changing layouts, 76–77
displaying, 75, 258–259
excluding items from, 108–109
moving row/column fields to, 55
overview, 10, 283
reports, 16–17, 58–59
required argument, 179, 180, 182, 283
row areas
adding fields to, 40–41
compared with category area, 112
overview, 10, 283
row fields
hiding items in, 82–83
overview, 10, 283
selecting, 26
showing hidden items in, 86–87
sorting, 60
row items, 62–63, 78–79
row-and-column format, 14
rows, selecting, 26
Run dialog box, 275
running total summary calculations, 154–155

S

Save As dialog box, 46–47, 205, 267
Save Workspace dialog box, 219
saving
passwords with external data connections, 240–241
queries using Microsoft Query, 205
workbooks, 243
workspaces, 219
scenario, 3, 283
Scientific format, 100
Search feature, 84–85
security (macro), 274–277
Security Notice dialog box, 277
Select Data Source dialog box, 209–210, 220
Select Database dialog box, 191–192, 235
Select Table dialog box, 211
Select XML Source dialog box, 221
self-certifying, 276
self-clarity, defined, 283
series area, 112, 283
series axis, 13
series field, 117, 122, 124, 128–129, 283
Set Advanced Options dialog box, 192
Set Title dialog box, 47
Setup dialog box, 193
shortcut keys, 103, 278–279
Show Values As dialog box, 151, 153
Slicer Connections dialog box, 91
Slicer Settings dialog box, 91
slicers, 88–93
snapshots, 51
solve order, 170–171, 283
Sort dialog box, 61, 202–203
sorting
ascending, 61
column fields, 60
data fields, 61
data with AutoSort, 60–61
PivotCharts, 124–125
query records, 202–203
records, 188
row fields, 60
source data, 11, 283
SQL Server database system (Microsoft), 191
Value Field Settings dialog box, 149
Values
- date/time, 66–67
- PivotTable, 80–81, 245
- text, 68–69
- ungrouping, 72–73
- unique, 9
Values & Source Formatting command, 51
Var(p) calculation, 148
VBA Editor, 268–269, 272
VBA macros
- activating Top 10 Filter feature, 81
- adding hidden page items to Report filter, 109
- applying
  - index calculations, 157
  - Quick Styles, 133
- changing field order, 57
- connecting PivotTables to slicers, 91
- controlling
  - OLAP cubes, 255
  - report filter layout, 77
- creating cube files, 265
- deleting
  - custom calculations, 173
  - PivotTable items, 107
- disabling/enabling subtotals, 159
- disconnecting slicers, 93
- displaying PivotChart data tables, 131
- editing custom calculations, 169
- external data refresh settings, 239
- Grand Totals, 141
- hiding group details, 70
- including items in PivotTable totals, 261
- listing custom calculations, 172
- pivot cache, 244
- referencing PivotTable values, 245
- renaming PivotTables, 39
- resetting reports, 259
- setting
  - percentage calculations, 153
  - Running Total calculations, 155
- showing
  - group details, 71
  - hidden items, 87
- specifying characters for errors and empty cells, 145
- storing passwords, 241
- subtotals, 161

Unhide dialog box, 269
INDEX

toggling
  between difference calculations, 151
  value of property, 137, 143
ungrouping row values, 73
VBA (Visual Basic for Applications), 113
views (PivotTable)
  changing
    order of fields within areas, 56–58
    report layouts, 58–59
  grouping values, 64–67
  hiding group details, 70
  moving
    fields to different areas, 54–55
    row/column items, 62–63
  showing group details, 71
  sorting data with AutoSort, 60–61
  ungrouping values, 72–73
Visual Basic for Applications (VBA), 113

W

Web pages
  as external data type, 206
  importing data from, 218–219
  publishing PivotTables to, 46–49
Web query, 218
what-if analysis, 3, 262–263, 283
What-If Analysis Settings dialog box, 263
Windows Security - Confirm Certificate dialog box, 277
Word tables (Microsoft), 206, 212–213
workbooks, 243–244
worksheet functions, 111, 174, 178. See also functions
worksheets, 14–15, 147, 207

X

XML (Extensible Markup Language), 206, 220–221, 283
XML Maps dialog box, 221