## Index

## A

A4 size paper, 289
absolute references, 128
accounting number format style, 158
add-ins
content, explained, 138
downloading from the office store, 140
task pane, explained, 138
uses of, 138
alignment
center across selection, 164
horizontal, of cell contents, 162
vertical, of cell contents, 168
alt key, 32
android. See operating system
apple
mac version of Excel 2016, 320
missing Excel 2016 features in mac version, 320
mouse, 22
windows version of excel, differences to, 267, 335
apple OS X. See operating system
arrange all, 64
Autocomplete
formula entry using, 86
AutoComplete
text entry using, 110
AutoFill
custom fill series, creating, 94
date series, examples of, 92
filling down, right, up and left with, 111
formulas, using to adjust, 90
smart tag options, using, 92
text and numeric series, creating with, 88
AutoFit rows and columns, 79, 119
automatic updates
applying, 26
switching on and off, 26
AutoSum, 66
AVERAGE functions, creating with, 82
MAX functions, creating with, 82
SUM a non contiguous range with, 80
AVERAGE function, 82

## B

backstage view, 48
binary workbook format, 38
borders
adding to cells, 174
draw border line tool, using to add, 175

## $C$

cancel button, 62
cells. See also styles; comments; formatting
active cell, 76
aligning contents of, horizontally, 162
aligning contents of, vertically, 168
borders, adding to, 174
conditional formatting of, 182
copying one to another, 112
copying using drag and drop, 114
custom styles, creating, 178
deleting, 82
entering text into, 62
entering values into, 62
merging, 164, 166
selecting a range of, 69
selecting all in a worksheet, 79
styles, applying to, 172
unique values, detecting with conditional formatting, 185
wrapping text within, 164, 166
center across selection, 164
chart source data
adding series, 230
assigning non contiguous, 226
changing, 224
changing using select data source dialog tools, 224
deleting series, 230
hidden and empty cells settings, 232
horizontal (category) axis labels, defining, 234
horizontal (category) axis labels, editing, 235
legend entries (series), 224
non-contiguous source data, charting by hiding rows and columns, 232
numerical axis labels, configuring, 234
series, deleting, 224
charts. See also chart source data; visualizations;
sparklines
3-D elements, formatting in, 220
activating, 209
axis title element, 215, 220
axis, formatting, 243
axis, maximum and minimum values, setting, 243
borders, formatting in, 218
category data explained, 228
color set, applying to, 216
combination, creating, 248
copying, 210,216
creating quick charts with visualizations, 186
creating quickly with two clicks, 208
data labels, adding to, 238
data labels, formatting, 239, 243, 250
data series explained, 220
data table, adding to, 215
deleting, 210, 216
deleting elements from, 222
elements, explained, 206
elements, formatting in, 218
elements, moving in, 222
elements, re-sizing in, 222
embedding in worksheet, 211
empty data points, dealing with, 236
fill color, changing of in elements, 240
fonts, changing sizes in, 223
format shape task pane, working with, 218
gradiated fill, adding, 252
gridlines explained, 220
gridlines, major \& minor, adding, 242
gridlines, major \& minor, enabling and disabling, 243
hidden and empty cells button, 237
horizontal (category) axis defined, 215, 220
layout, changing, 214, 215, 220
layouts, explained, 206
legend, displaying in different places, 223
line with markers chart type, creating, 246
moving average, adding, 250
naming, 210, 216
numerical axis labels, configuring, 234
pie charts, 244
pie charts, pulling a slice out of the pie, 245
pie charts, rotating, 245
plot area, 220
recommended charts feature, 212
re-sizing, 210, 216
rows/columns, switching, 228
secondary axis, adding, 247
selection pane, using to activate, 210
series data explained, 228
shadows, applying to elements, 220
shapes, inserting into, 241
sheet, moving to, 211
style, changing, 216
styles, explained, 206
templates, creating from, 254
text box, adding to, 240
tips, 215
title element, 215, 218, 220
title element, linking to worksheet cell, 218
title element, re-positioning to dead center, 222
transparency, 219
trend line, adding, 250
type, changing, 248
types, explained, 206
values and labels, importance of selecting, 208
vertical (value) axis defined, 215, 220
vertical axis, creating chart with two, 246
$x$ axis defined, 215,220
y axis defined, 215, 220
check box, 46
clipboard
described, 112
close button, 30
cloud computing. See also OneDrive; Excel Online, See also OneDrive; Excel Online
advantages of (sidebar), 321
collapse dialog button, 225
color sets, component of a theme, 170
columns
deleting, 108
freezing, 142
hiding, 232
inserting, 108
making several the same size, 79
resizing automatically, 78
selecting, 72
selecting non contiguous, 72
unhiding, 232
width of, manually changing, 79
comma style, 158
comma[0] style, 158
comments
changing the user name shown in, 122
displaying, one or more all of the time, 125
hiding, 125
inserting, 122
moving, 124
printing, 126
printing all at the end, 126
printing exactly as displayed on a worksheet, 126
re sizing, 123
showing all, 124
conditional formatting. See also visualizations
explained, 182
formula driven, 188
highlighting a complete row of data with, 189
quick analysis button, applying with, 182
rules manager, managing multiple with, 184
unique values, detecting with, 185
confirm button, 62
copying
one cell to another cell, 112
using drag and drop, 114
currency
prefixes, 63
styles for, 159
cursor shapes, explained, 69
custom formatting codes, 155, 160
custom lists, 94
cut, 112

## D

dates and times
custom format, 155
difference in days between two dates, calculating, 157
formatting, 154
internationally safe formats, benefits of, 154
serial number, explained, 156
time value, containment within dates, 156
decimal places, changing number of, 116
documents. See also files
organization of, 40
pinning, 40
downloading the sample files, 34
drop-down list, 46

## E

editing cell contents, 62
Excel 97-2003 workbook format, 38
Excel Online, 322, See also OneDrive
browsers, supported, 325
edit workbook simultaneously with other users using, 328
open workbook using, 324
overview of, 322
ribbon, hiding and showing in, 325
save local copy of read-only workbook, 327
save, automatic, explained, 324
excel version. See office version
Excel workbook file format, 36, 38
exponential. See series

F1-F12 keys, 74
files. See also workbooks; documents
formats supported, 36, 38
opening with earlier Excel versions, 38
organization of, 40
fill. See AutoFill
find and replace
options, 274
using, 274
fn key, 74
font sets, component of a theme, 170
fonts
default, changing, 178
font sets, use in themes, 170
serif and sans serif explained, 170
format painter, 196
formatting. See also themes
3-D Elements, 220
aligning cell contents horizontally, $\mathbf{1 6 2}$
aligning cell contents vertically, 168
borders around cells, 174
cell styles, 172
chart borders, 218
chart elements, 218
color, 172
conditional, 182
custom cell styles, 178
custom codes, 160
dates, 154
format painter, copying with, 196
numbers using built-in styles, 158
rotating text, 198
shadows, 220
themes, changing, 172
themes, understanding, 170
transparency, 219
visualizations, comparing values with, 186
formula bar
expanding and collapsing, 164, 166
explanation of, 68
graphic showing location of, 36
showing and hiding, 52
formulas
absolute and relative references in, 128
Autocomplete, creating with, 86
AutoFill, adjusting with, 90
AVERAGE function, creating using AutoSum, 82
conditional format, driving with, 188
cross-worksheet, creating, 270

F2 key to display range addressed by, 83
formula bar, viewing in, 68
MAX function, creating using AutoSum, 82
mouse selection, creating with, 84
multiplication operator (*) using in, 85
SUM function, creating using AutoSum, 66
syntax box, understanding, 86
visual keyboard technique, creating with, 85
fractions, entering into cells, 63
freeze columns and rows, 142
full screen view, 32
functions
AVERAGE, 82
MAX, 82
ROUND, 159
SUM, 66, 80

## G

gallery, 46
goto special, 77
growth. See series

## H

hashes
indication that columns are too narrow by, 154
help system
execute command, using to, 54
searching, 54
hide rows and columns, 232
hide values, using three semicolon custom format, 161
hiding and unhiding worksheets, 268

## I

Intelliprint, 292
internet. See OneDrive; Excel Online
iPad
pro, 318
success story of (sidebar), 318
iPad, described, 319

## J

justify, horizontal alignment option, 163

## K

keyboard
alt key, 32
F1-F12 keys, 74
fn key, 74
option key, 32
keyboard shortcuts
AutoSelect a range, 77
AutoSum, 66
bold, 72
close, 30
copy, 112
create a mixed cell reference, 131
cut, 113
cycle through worksheets, 43
delete column, 108
delete row, 108
fill down, 111
fill right, 111
find, 274
full screen view, 32
insert a comment into a cell, 122
insert chart, 208
insert column, 108
insert row, 108
italic, 72
make a relative reference absolute, 129
mission control, 64
move to cell A1, 142
move to the end of a range, 144
paste, 112
quit, 30
redo, 120
replace, 274
ribbon, show/hide, 44
save, 36
save as, 36
select every cell in a worksheet, 78
spell check, 146
underline, 72
undo, 120
workbook, create new, 64

## $L$

landscape orientation, 283
language, 146
letter size paper, 289
lines, adding beneath cells, 174

## M

macro enabled workbook format, 38
magic mouse, 22
Magic Mouse, 98
marching ants, 66
marquee, 66

MAX function, creating using AutoSum, 82
menus
shortcut (contextual), 22
standard, 46
merge and center button, 164, 166
merge, cells, 164, 166
microprocessor
AMD and Intel, 318
ARM instruction set, 318
desktop, laptop and smartphone, differences
between, 318
explained, 318
intel atom $\times 5$ and $\times 7,319$
used in tablet and smartphone devices, 318
x64 instruction set, 318
microsoft autoupdate, 26
microsoft surface (tablet computer), 319
mighty mouse, 22
minimize button, 30
mixed cell references, 130
mouse
configuring, 22
right clicking, 22
scroll wheel, 98
zooming with, 98
moving
the Excel window, 30
multiplication operator ( ${ }^{*}$ ), 85

## N

name box, 34
negative numbers, entering into cells, 63
normal view, 50
number sign (\#), 78
numbers
changing number of decimal points displayed, 116
using built-in styles with, 158

## 0

office insider program, 26
office theme, changing, 28
office version. See also Excel Online
availability of different versions, 321
checking Excel version, 26
office 2016 for mac, 320
office 2016 for windows, 320
office 2016 mobile, 320
office 2016 online, 321

OneDrive. See also, microsoft account; Excel Online
advantages of using, 317
alternatives to, 317
link, sharing using share button, 326
lunchtime lock, problems caused by, 316
open a workbook from, 316
save a workbook to, 36,314
save local copy of read-only workbook, 327
security concerns, 315
SharePoint, using in place of, 315
social networks, sharing links via, 326
subscriptions, 314
operating system
android, 319
apple OS X, 319
explained, 319
iOS, 319
Windows 10 mobile, 319
option key, 32
organizing
excel files, 40
sample files folder, 34

## P

page layout view, 50, 284
paper sizes explained, 289
paste, 112
paste special, 117
paste values, 117
PDF, workbook format, 39
percentage style, 159
portrait orientation, 283
pound sign (\#), 78
precision, changing to avoid rounding errors, 159
printing
area, setting, 300
autoheaders and autofooters, adding, 294
cell comments, adding, 126
column headings, showing on every page, 302
comments, exactly as displayed on a worksheet, 126
comments, printing all at the end, 126
headers \& footers, adding custom, 296
headers \& footers, including an ampersand (\&) in, 296
headers \& footers, specifying different first, odd and even, 298
margin settings, changing the default, 285
margins, adjusting using rulers, 285
margins, custom, adjusting with page setup, 286
over then down, page order, changing with, 304
page breaks, adjusting using page break preview, 292
page breaks, inserting and deleting, 290
page number, setting the starting value, 294
page order, changing, 304
paper orientation, changing, 283
paper size, setting, 288
paper sizes explained, 289
part of a worksheet, 300
previewing on screen, 48, 50, 282
row headings, showing on every printed page, 302
rulers, showing and hiding, 285
scaling to fit paper, 288
several worksheets at the same time, 304
processor. See microprocessor

## 0

quick access toolbar
adding commands to, 48
adding separators to, 48
deleting commands from, 48
quick analysis
conditional formatting, creating with, 182
quit excel, 30
quotations
Aristotle, 46
Baltasar Gracián, 96
Benjamin Disraeli, 281
Confucius, 19
David Hume, 250
Euripides, 21
Frederick R. Barnard, 205
Henry Ford, 261
Margaret Thatcher, 107
Oscar Wilde, 153
Robert Collier, 30
Winston Churchill, 18

## R

ranges
AutoSelect, selecting automatically with, 76
copying data across, 70
entering data into, 70
non contiguous, selecting, 74
select all button, to select a range containing every cell in a worksheet, 79
selecting, 68
selecting visually for formulas with the mouse, 84
transposing, 118
visualizations, comparing values with, 186
recommended charts, using, 212
redo, 120
relative references, 128
replace cell contents using find and replace, 274
reset to match style, 221
restore down button, 30
ribbon
benefits of wide screen with, 44
command groups on, 46
contextual tabs, explanation of, 45
controls on, 46
font panel controls, explanation of, 45
overview, 44
showing and hiding (minimizing), 45, 52
rotate text, 198
rounding errors, avoiding, 159
rows
conditional format, highlighting entire row with, 189
copying contents of one to another, 114
deleting, 108
freezing, 142
hiding, 232
inserting, 108
making several the same size, 79
manually setting height of, 79
resizing automatically, 78
selecting, 72
selecting non contiguous, 72
unhiding, 232
rulers, showing and hiding in page layout view, 285
rules manager
controlling conditional formatting with, 184
editing rules with, 186

## S

sample files
downloading, 34
organizing folder, 34
sans serif and serif fonts explained, 170
save, 36,38
select all button, 264
selecting cells, 68
series
dialog, 96
exponential, 96
growth, 96
linear, 96
start value, 96
step value, 96
stop value, 96
serif and sans serif fonts explained, 170
share button, 326
shortcut keys. See keyboard shortcuts
smart tag
explained, 68
options, 92
using to paste values, 117
SmartPhone
explained, 318
sparklines, 190
column type, inserting, 191
date axis, specifying for, 194
deleting, 192
empty cells, setting options for, 237
formatting
line thickness (weight), changing, 193
marker (data point) color, 193
markers (data points), 193
single sparkline rather than group, 195
group and ungroup, 195
hidden cells, show/hide on sparkline, 237
inserting group of into a range of cells, 190
line type, inserting, 191
size of containing cell, changing, 193
style, changing with style gallery, 193
type, changing, 193
ungroup and group, 195
uses of, 190
vertical axis, applying common scaling to
sparkline group, 192
win/loss type, inserting, 191
spell checking
dictionary language, setting, 146
using, 146
split button, 46
split, window into multiple panes, 144
start Excel, 24
styles
accounting number format, 158
applying cell styles, 172
built-in, for numbers, 158
comma, 158
comma[0], 158
currency[0], 158
custom, 178
importance of using theme colors and fonts, 181
master style book, using, 180
merging, 180
percentage, 159
removing from cells, 172
SUM function
creating manually using formula
AutoComplete, 86
creating using AutoSum, 66
surface. See microsoft surface (tablet computer) switch windows, 64

## T

tablet computer
explained, 318
tabs. See worksheets
templates
creating, 134
custom, about, 132
potential problems when using samples, 132
using, 24, 136
the smart method
learning by participation, 19
two facing pages rule, 18
themes. See also office theme
changing, 172
changing the default, 170
color sets, 170
custom, creating, 176
explained, 170
font sets, 170
importance of using theme colors and fonts, 170
times. See dates and times
title bar, 64
touchscreen, gestures, 324
transparency, 219
transpose, 118
trend. See also series
linear and exponential, 96
trend line. See charts

## U

undo, 120
unhide rows and columns, 232
unique values, detecting with conditional formatting, 185
values. See also Styles
built-in styles, applying to, 158
currency prefixes, using with, 63
entering into cells, 62
fractions, entering into cells, 63
negative numbers, entering into cells, 63
precision, changing to avoid rounding errors, 159
rounding errors, avoiding, 159
version. See office version
vertically align cell contents, 168
visualizations, 186
color scale, 186
comparing values with, 186
data bar, 186
icon set, 186
rules manager, editing with, 186
use of show bar only to create quick charts, 186

## w

web browser. See OneDrive; Excel Online wildcards
searches using, 274
windows
arrange all, using to automatically size, 64
closing, 30
maximizing, 32
minimizing, 30
moving, 30
resizing, 30
restoring, 30
splitting into multiple panes, 144
switching to view a different workbook, 64
views, creating two of the same workbook, 262
workbooks. See also files
changing default number of worksheets in, 42
creating new, 64
duplicating worksheets in, 264
open from OneDrive, 316
opening, 34
save to OneDrive, 314
saving, 36, 38
switching between open workbooks, 64
viewing the same workbook in two windows, 262
viewing two at the same time, 64
views, 50
worksheets
3-D creating, 272
adding, 42
changing default number of, 42
chart worksheets, explanation of, 42
copying from one workbook to another, 266
deleting, 42
duplicating, 264
gridlines, switching off in, 174
groups, 272
hiding and unhiding, 268
maximum number of rows and columns in, 34
navigating, 34,42
non-contiguous, selecting, 272
renaming, 42
tab colors, changing, 43
wrapping
splitting wrapped text into different lines, 169
text in cells, 164, 166

## 7

zoom button, 30, 32
zoom control, 98

