Computer Solutions: Excel 2007 Revisions

Introduction

(1) Many of these Excel 2007 Computer Solutions involve only minor changes to one or more of the numerical steps in the Sixth Edition. In other cases, entire steps may be replaced by new ones, or new steps may be appended to those in the existing procedure.
(2) Within the Data ribbon, Excel’s Data Analysis add-in should appear as a menu item. If it does not, load the Data Analysis module as follows: Click the Microsoft Office button at the upper left corner of the screen. Click the Excel Options button. Click Add-Ins. Be sure that Excel Add-Ins appears in the Manage box, then click Go. In the Add-Ins Available box, select Analysis ToolPak and click OK. The Analysis ToolPak should now be available for use. If you get a prompt indicating that the Analysis ToolPak is not installed on your computer, click Yes to install it.
(3) After installing Data Analysis Plus 5.0 using the CD in the back of the text, this add-in will appear at the left side of the Excel 2007 Add-Ins ribbon.

Chapter 2: Visual Description of Data

Computer Solutions 2.1: The Histogram, p. 21
Step 3 becomes: From the Data ribbon, click Data Analysis in the right-most menu section. Within Analysis Tools, click Histogram. Click OK.
In step 6, replace the 3rd and 4th sentences with: Right-click on any one of the bars in the chart. In the Format Data Series menu, click on the Gap Width slider and move it leftward to the No Gap position. Click Close.

Computer Solutions 2.2: The Stem-And-Leaf Display, p. 26
In step 1, replace the third sentence with: From the Add-Ins ribbon, click Data Analysis Plus in the left-most menu section.

Computer Solutions 2.3: The Dotplot, p. 27
UNCHANGED – Excel does not do a Dotplot.

Computer Solutions 2.4: The Bar Chart, p. 29
Replace steps 2 through 6 with: Click on A4 and drag to C7 to select cells A4:C7. From the Insert ribbon, click Bar from the Charts submenu. From the next menu, click the first choice (Clustered Bar) from the 2-D Bar section.
In step 7, replace “Clear” with Delete and add: Additional editing can include insertion of the desired labels: Double-click within the chart area. From the Layout ribbon, use the Chart Title and Axis Titles selections within the Labels menu.
Computer Solutions 2.5: The Line Chart, p. 30
Replace steps 2 through 5 with: From the Insert ribbon, click Scatter from the Charts menu. From the Scatter submenu, click the fifth option (Scatter with Straight Lines).
In step 6, replace “Clear” with Delete and add: Additional editing can include insertion of the desired labels: Double-click within the chart area. From the Layout ribbon, use the Chart Title and Axis Titles selections within the Labels menu.

Computer Solutions 2.6: The Pie Chart, p. 32
Replace steps 2 through 6 with: Click on A4 and drag to B6 to select cells A4:B6. From the Insert ribbon and its Charts menu, click Pie. Click on the first option (Pie) in the 2-D Pie menu.
In step 7, add: Additional editing can include insertion of the desired chart title: Double-click within the chart area. From the Layout ribbon, use the Chart Title and Axis Titles selections within the Labels menu.

Computer Solutions 2.7: The Scatter Diagram, p. 40
Replace steps 2 through 5 with: From the Insert ribbon, click Scatter from the Charts menu. From the Scatter submenu, click the first option (Scatter with only Markers).
In step 6, the material following the third sentence is replaced with: In the Trendline Options menu, select the Linear and Display Equation on chart options. Click Close.
In step 7, replace “Clear” with Delete and add: Additional editing can include insertion of the desired labels: Double-click within the chart area. From the Layout ribbon, use the Chart Title and Axis Titles selections within the Labels menu.
Note: Excel’s default equation rounds the constant to 64.36 instead of 64.37. You can obtain the 64.368 shown in the text by carrying out these steps: Right-click on the equation and select Format Trendline Label. In the Number menu, select Number and enter 3 into the Decimal places: box. Click Close.

Computer Solutions 2.8: The Cross-Tabulation, p. 45
Replace steps 2 through 4 with: From the Insert ribbon and its Tables menu, click PivotTable. In the Create PivotTable menu, click Select a table or range. The cells A1:C51 should already be represented in the Table/Range box; if not, enter this range into the box. Click to select Existing Worksheet and enter D1 into the box. Click OK.
Replace step 5 with: Click the AgeCat label at the right and drag it into the Row Fields rectangle. Click the Gender label at the right and drag it into the Column Fields rectangle. Click the Seconds label at the right and drag it into the Data Items rectangle.
Add step 6: Right-click on any one of the data values within the table, then select Value Field Settings. In the Summarize value field by box, select Count. Enter Count into the Custom Name: box. Click OK.

Computer Solutions 2.9: Cross-Tabulation with Cell Summary Information, p. 46
Replace steps 1 and 2 with: This PivotTable is constructed by applying the procedure described above for Computer Solutions 2.8. However, in the new step 6, select and type Average instead of Count. Also, click Number Format, select Number, and specify 2 in the Decimal places box. Click OK. Click OK.
Replace step 3 with: Click on any cell within the table. From the Insert ribbon, select Column from the Charts menu. Click to select the first option (Clustered Column) from the 2-D Column choices. The chart can now be edited and the desired labels inserted: Double-click within the chart area. From the Layout ribbon, use the Chart Title and Axis Titles selections within the Labels menu.
Chapter 3: Statistical Description of Data

Computer Solutions 3.1: Descriptive Statistics – Central Tendency, p. 65
Replace step 2 with: From the Data ribbon, click Data Analysis in the right-most menu section. Within Analysis Tools, click Descriptive Statistics. Click OK.

Computer Solutions 3.2: Descriptive Statistics – Dispersion, p. 75
As described in the text and Computer Solutions 3.1, above.

Computer Solutions 3.3: The Box Plot, p. 77
In step 1, replace “Click Tools. Click Data Analysis Plus” with: From the Add-Ins ribbon, click Data Analysis Plus in the left-most menu section.
Replace step 3 with: Excel 2007 will generate the numerical values associated with the boxplot, but will not properly display the boxplot itself.

Computer Solutions 3.4: Standardizing the Data, p. 81
UNCHANGED

Computer Solutions 3.5: Coefficient of Correlation, p. 88
Excel Option 1, to simply obtain the coefficient of correlation:
In step 1, replace the last two sentences with: From the Data ribbon, click Data Analysis in the right-most menu section.
In step 2, replace “Data range box” with Input Range box.
Excel Option 2, to display r² on an existing chart like the one from Computer Solutions 2.7:
Step 2 becomes: In the Trendline Options menu, select Display R-squared value on chart. Click Close.

Chapter 4: Sampling

Computer Solutions 4.1: Simple Random Sampling, p. 122
In step 1, replace the first two sentences with: From the Data ribbon, click Data Analysis in the right-most menu section.

Chapter 6: Discrete Probability Distributions

Computer Solutions 6.1: Binomial Probabilities, p. 180
I. Excel procedure for just one individual or cumulative binomial probability
In step 1, replace the second sentence with: From the Formulas ribbon, click on the Insert Function symbol at the extreme left.
II. Excel procedure for a complete set of individual or cumulative binomial probabilities
UNCHANGED
Computer Solutions 6.2: Hypergeometric Probabilities, p. 185
I. Excel procedure for obtaining an individual hypergeometric probability
In step 1, replace the second sentence with: From the Formulas ribbon, click on the Insert Function symbol at the extreme left.
II. Excel procedure for a complete set of individual or cumulative hypergeometric probabilities
In step 2, replace “Click f,” with: From the Formulas ribbon, click on the Insert Function symbol at the extreme left.

Computer Solutions 6.3: Poisson Probabilities, p. 191
I. Excel procedure for just one individual or cumulative Poisson probability
In step 1, replace the second sentence with: From the Formulas ribbon, click on the Insert Function symbol at the extreme left.
II. Excel procedure for a complete set of individual or cumulative Poisson probabilities
UNCHANGED

Computer Solutions 6.4: Simulating Observations From a Discrete Probability Distribution, p. 195
In step 1, replace the second and third sentences with: From the Data ribbon, click Data Analysis in the right-most menu section.

Chapter 7: Continuous Probability Distributions

Computer Solutions 7.1: Normal Probabilities, p. 219
I. Excel procedure for the cumulative probability associated with one x value
In step 1, replace “Click f,” with: From the Formulas ribbon, click on the Insert Function symbol at the extreme left.
II. Excel procedure for cumulative probabilities associated with a set of x values
In step 2, replace “Click f,” with: From the Formulas ribbon, click on the Insert Function symbol at the extreme left.

Computer Solutions 7.2: Inverse Normal Probabilities, p. 220
I. Excel procedure for the x value associated with one cumulative probability
In step 1, replace “Click f,” with: From the Formulas ribbon, click on the Insert Function symbol at the extreme left.
II. Excel procedure for the x values associated with a set of cumulative probabilities
In step 2, replace “Click f,” with: From the Formulas ribbon, click on the Insert Function symbol at the extreme left.

Computer Solutions 7.3: Exponential Probabilities, p. 230
I. Excel procedure for the cumulative probability associated with one x value
In step 1, replace “Click f,” with: From the Formulas ribbon, click on the Insert Function symbol at the extreme left.
II. Excel procedure for cumulative probabilities associated with a set of x values
In step 2, replace “Click f,” with: From the Formulas ribbon, click on the Insert Function symbol at the extreme left.
Computer Solutions 7.4: Inverse Exponential Probabilities, p. 231
UNCHANGED (Excel does not currently offer inverse exponential probabilities.)

Computer Solutions 7.5: Simulating Observations From a Continuous Probability Distribution, p. 233
In step 1, replace the second and third sentences with: From the Data ribbon, click Data Analysis in the right-most menu section.

Chapter 8: Sampling Distributions

Computer Solutions 8.1: Sampling Distributions and Computer Simulation, p. 259
In step 1, replace the second and third sentences with: From the Data ribbon, click Data Analysis in the right-most menu section.
Step 6 becomes: From the Data ribbon, click Data Analysis in the right-most menu section. Within Analysis Tools, click Histogram. Click OK. Enter F1:F201 into Input Range. Enter J1:J32 into Bin Range. Select Labels. Select Output Range and enter K1 into the dialogue box. Select Chart Output. Click OK. In fine-tuning the histogram, eliminate the gaps between the bars by right-clicking on one of the bars, selecting the Format Data Series menu, then clicking on the Gap Width slider and moving it leftward to the No Gap position, and clicking Close.

Chapter 9: Confidence Intervals

Computer Solutions 9.1: Confidence Interval For Population Mean, σ Known, p. 278
Excel confidence interval for μ based on raw data and σ known
In step 1, replace “Click Tools. Click Data Analysis Plus” with: From the Add-Ins ribbon, click Data Analysis Plus in the left-most menu section.
Excel confidence interval for μ based on summary statistics and σ known
UNCHANGED

Computer Solutions 9.2: Confidence Interval For Population Mean, σ Unknown, p. 285
Excel confidence interval for μ based on raw data and σ unknown
In step 1, replace “Click Tools. Click Data Analysis Plus” with: From the Add-Ins ribbon, click Data Analysis Plus in the left-most menu section.
Excel confidence interval for μ based on summary statistics and σ unknown
UNCHANGED

Computer Solutions 9.3: Confidence Interval For Population Proportion, p. 289
Excel confidence interval for π based on summary statistics
UNCHANGED
Excel confidence interval for π based on raw data
In step 1, replace “Click Tools. Click Data Analysis Plus” with: From the Add-Ins ribbon, click Data Analysis Plus.

Computer Solutions 9.4: Sample Size Determination, p. 296
UNCHANGED
Chapter 10: Hypothesis Tests: One Sample

Computer Solutions 10.1: Hypothesis Test For Population Mean, \( \sigma \) Known, p. 324
Excel hypothesis test for \( \mu \) based on raw data and \( \sigma \) known
In step 1, replace “Click Tools. Click Data Analysis Plus” with: From the Add-Ins ribbon, click Data Analysis Plus.
Excel hypothesis test for \( \mu \) based on summary statistics and \( \sigma \) known
UNCHANGED

Computer Solutions 10.2: Hypothesis Test For Population Mean, \( \sigma \) Unknown, p. 333
Excel hypothesis test for \( \mu \) based on raw data and \( \sigma \) unknown
In step 1, replace “Click Tools. Click Data Analysis Plus” with: From the Add-Ins ribbon, click Data Analysis Plus.
Excel hypothesis test for \( \mu \) based on summary statistics and \( \sigma \) unknown
UNCHANGED

Computer Solutions 10.3: Hypothesis Test For Population Proportion, p. 340
Excel hypothesis test for \( \pi \) based on summary statistics
UNCHANGED
Excel hypothesis test for \( \pi \) based on raw data
In step 1, replace “Click Tools. Click Data Analysis Plus” with: From the Add-Ins ribbon, click Data Analysis Plus.

Computer Solutions 10.4: The Power Curve For A Hypothesis Test, p. 349
UNCHANGED

Chapter 11: Hypothesis Tests: Comparing Two Samples

Computer Solutions 11.1: Pooled-Variances t-Test for \( (\mu_1 - \mu_2) \), Population Variances Unknown but Assumed Equal, p. 368
Excel pooled-variances t-test for \( (\mu_1 - \mu_2) \), based on raw data
In step 2, replace “Click Tools. Click Data Analysis” with: From the Data ribbon, click Data Analysis.
In the Excel Unstacking Note, lines 5 and 6, replace the “Click Data. Click Sort. Enter format into ... Click OK.” steps with: From the Data Ribbon, go to the Sort & Filter menu and click the AZ (Sort Smallest to Largest) symbol.
Excel pooled-variances t-test and confidence interval for \( (\mu_1 - \mu_2) \), based on summary statistics
UNCHANGED
Computer Solutions 11.2: Unequal-Variances t-Test for \((\mu_1 - \mu_2)\), Population Variances Unknown and Not Equal, p. 374
Excel unequal-variances t-test for \((\mu_1 - \mu_2)\), based on raw data
In step 1, replace “Click Tools. Click Data Analysis” with: From the Data ribbon, click Data Analysis.
Excel unequal-variances t-test and confidence interval for \((\mu_1 - \mu_2)\), based on summary statistics UNCHANGED

Computer Solutions 11.3: The z-Test for \((\mu_1 - \mu_2)\), p. 380
Excel z-test for \((\mu_1 - \mu_2)\), based on raw data
Open the CX11GRAD.XLS workbook and perform step 3 first, in order to have variance information available for the dialogue box that will be involved in this analysis.
Perform step 1 next, replacing “Click Tools. Click Data Analysis.” with: From the Data ribbon, click Data Analysis.
Carry out step 2, then proceed directly to step 4.
Excel z-test and confidence interval for \((\mu_1 - \mu_2)\), based on summary statistics UNCHANGED

Computer Solutions 11.4: Comparing the Means of Dependent Samples, p. 386
Excel t-test for comparing the means of dependent samples, based on raw data
In step 1, replace “Click Tools. Click Data Analysis.” with: From the Data ribbon, click Data Analysis.
Excel t-test for comparing the means of dependent samples, based on summary statistics UNCHANGED

Computer Solutions 11.5: The z-Test for Comparing Two Sample Proportions, p. 391
Excel, Using Summary Data:
Excel comparison of \(p_1\) and \(p_2\) when the hypothesized value of \((\pi_1 - \pi_2)\) is 0, for summary data UNCHANGED
Excel comparison of \(p_1\) and \(p_2\) when the hypothesized value of \((\pi_1 - \pi_2)\) is not 0, for summary data UNCHANGED
Excel confidence interval for \((\pi_1 - \pi_2)\), based on summary data UNCHANGED
Excel, Using Raw Data:
Excel comparison of \(p_1\) and \(p_2\) for raw data, regardless of the hypothesized value of \((\pi_1 - \pi_2)\)
In step 1, replace “Click Tools. Click Data Analysis Plus.” with: From the Add-Ins ribbon, click Data Analysis Plus.
Excel confidence interval for \((\pi_1 - \pi_2)\), based on raw data UNCHANGED

Excel F-test comparing sample variances, based on raw data
In step 1, replace “Click Tools. Click Data Analysis.” with: From the Data ribbon, click Data Analysis.
Excel F-test comparing sample variances, based on summary statistics UNCHANGED
Chapter 12: Analysis of Variance

Computer Solutions 12.1: One-Way Analysis of Variance, p. 422
In step 1, replace “Click Tools. Click Data Analysis.” with: From the Data ribbon, click Data Analysis.
In the Excel Unstacking Note, replace from item (2) onward with: (2) From the Data Ribbon, go to the Sort & Filter menu and click the AZ (Sort Smallest to Largest) symbol. The data for sample 1 will now be listed directly above the data for sample 2, which in turn will be directly above the data for sample 3 – from here, we need only select each grouping of data and either move or copy it to its own column.

Computer Solutions 12.2: Randomized Block Analysis of Variance, p. 436
In step 1, replace “Click Tools. Click Data Analysis.” with: From the Data ribbon, click Data Analysis.

Computer Solutions 12.3: Two-Way Analysis of Variance, p. 451
In step 1, replace “Click Tools. Click Data Analysis.” with: From the Data ribbon, click Data Analysis.

Chapter 13: Chi-Square Applications

Computer Solutions 13.1: Chi-Square Test for Goodness of Fit, p. 473
In step 2, replace “Click f_{x}” with: From the Formulas ribbon, click on the Insert Function symbol at the extreme left.
In the note at the end, replace “Click f_{x},” with: From the Formulas ribbon, click on the Insert Function symbol at the extreme left.

Computer Solutions 13.2: Chi-Square Goodness-of-Fit Test for Normality, p. 475
In step 1, replace “Click Tools. Click Data Analysis Plus.” with: From the Add-Ins ribbon, click Data Analysis Plus.

Computer Solutions 13.3: Chi-Square Test for Independence of Variables, p. 481
Excel chi-square test for independence of variables, from summary information
In step 1, replace “Click Tools. Click Data Analysis Plus.” with: From the Add-Ins ribbon, click Data Analysis Plus.
Excel chi-square test for independence of variables, from raw data
In step 1, replace “Click Tools. Click Data Analysis Plus.” with: From the Add-Ins ribbon, click Data Analysis Plus.

Computer Solutions 13.4: Chi-Square Test Comparing Proportions From Independent Samples, p. 486
UNCHANGED
Computer Solutions 13.5: Confidence Interval for a Population Variance, p. 492
Excel confidence for a population variance, based on summary information
UNCHANGED
Excel confidence for a population variance, based on raw data
In step 1, replace “Click Tools. Click Data Analysis Plus.” with: From the Add-Ins ribbon, click Data Analysis Plus.

Computer Solutions 13.6: Hypothesis Test for a Population Variance, p. 493
Excel hypothesis test for a population variance, based on summary information
UNCHANGED
Excel hypothesis test for a population variance, based on raw data
In step 1, replace “Click Tools. Click Data Analysis Plus.” with: From the Add-Ins ribbon, click Data Analysis Plus.

Chapter 14: Nonparametric Methods

Computer Solutions 14.1: Wilcoxon Signed Rank Test for One Sample, p. 510
In step 2, replace “Click Tools. Click Data Analysis Plus.” with: From the Add-Ins ribbon, click Data Analysis Plus.

Computer Solutions 14.2: Wilcoxon Signed Rank Test for Comparing Paired Samples, p. 513
In step 1, replace “Click Tools. Click Data Analysis Plus.” with: From the Add-Ins ribbon, click Data Analysis Plus.

Computer Solutions 14.3: Wilcoxon Rank Sum Test for Two Independent Samples, p. 518
In step 1, replace “Click Tools. Click Data Analysis Plus.” with: From the Add-Ins ribbon, click Data Analysis Plus.

Computer Solutions 14.4: Kruskal-Wallis Test for Comparing More Than Two Independent Samples, p. 522
In step 1, replace “Click Tools. Click Data Analysis Plus.” with: From the Add-Ins ribbon, click Data Analysis Plus.

Computer Solutions 14.5: Friedman Test for the Randomized Block Design, p. 527
In step 1, replace “Click Tools. Click Data Analysis Plus.” with: From the Add-Ins ribbon, click Data Analysis Plus.

Computer Solutions 14.6: Sign Test for Comparing Paired Samples, p. 532
In the note at the end, replace “Tools, Data Analysis Plus” with: Add-Ins, Data Analysis Plus.

Computer Solutions 14.7: Runs Test for Randomness, p. 536
UNCHANGED
Computer Solutions 14.8: Kolmogorov-Smirnov Test for Normality, p. 539
UNCHANGED – Excel does not offer this test.

Computer Solutions 14.9: Spearman Coefficient of Rank Correlation, p. 541
In step 1, replace “Click Tools. Click Data Analysis Plus.” with: From the Add-Ins ribbon, click Data Analysis Plus.
In step 2, at the end of the second line, add: Click OK.

Chapter 15: Simple Linear Regression

Computer Solutions 15.1: Simple Linear Regression, p. 556
In step 1, replace “Click Tools. Click Data Analysis.” with: From the Data ribbon, click Data Analysis.
In step 2, delete the final sentence.
Add steps 3 and 4:
Step 3. Right-click in any empty space within the Line Fit Plot. Click on Change Chart Type. From the XY (Scatter) submenu, click on the first option (Scatter with only Markers). Click OK.
Step 4. Right-click on any one of the linearly-arranged points that describe the predicted values for the data points and click Delete. Right-click on any one of the data points in the scatter diagram and click Add Trendline. Select the Linear option and click Close. Make formatting adjustments to the chart.

Computer Solutions 15.2: Interval Estimation in Simple Linear Regression, p. 563
In step 2, replace “Click Tools. Click Data Analysis Plus.” with: From the Add-Ins ribbon, click Data Analysis Plus.

Computer Solutions 15.3: Coefficient of Correlation, p. 568
In step 1, replace “Click Tools. Click Data Analysis.” with: From the Data ribbon, click Data Analysis.

Computer Solutions 15.4: Residual Analysis, p. 578
Replace text instructions with:
Step 1. The data are in file CX15DEX.XLS. From the Data ribbon, click Data Analysis. Select Regression. Click OK.
Step 2. Enter B1:B6 into the Input Y Range box. Enter A1:A6 into the Input X Range box. Select Labels. Enter E1 into the Output Range box. Select all four items in the Residuals section and select Normal Probability Plot. Click OK.
Note: Excel will generate a staggered stack of the graphs. If you experience difficulty in dragging a graph to a different location, you can copy it to the desired location by following this procedure: Right-click within an empty section of the box in which the graph appears. Click Copy. Right-click on an empty cell where you want the upper left corner of the graph to appear, click Paste Special, click Microsoft Office Drawing Object, and click OK.
Chapter 16: Multiple Regression

**Computer Solutions 16.1: Multiple Regression, p. 605**
In step 1, replace “Click Tools. Click Data Analysis.” with: From the Data ribbon, click Data Analysis.

**Computer Solutions 16.2: Interval Estimation in Multiple Regression, p. 612**
In step 2, replace “Click Tools. Click Data Analysis Plus.” with: From the Add-Ins ribbon, click Data Analysis Plus.

**Computer Solutions 16.3: Residual Analysis in Multiple Regression, p. 626**
Follow the text procedure for Computer Solutions 16.1 but, in step 1, replace “Click Tools. Click Data Analysis.” with: From the Data ribbon, click Data Analysis.
Note: Excel will generate a staggered stack of the graphs. If you experience difficulty in dragging a graph to a different location, you can copy it to the desired location by following this procedure: Right-click within an empty section of the box in which the graph appears. Click Copy. Right-click on an empty cell where you want the upper left corner of the graph to appear, click Paste Special, click Microsoft Office Drawing Object, and click OK.

Chapter 17: Model Building

**Computer Solutions 17.1: Fitting a Polynomial Regression Equation, One Predictor Variable, p. 648**
In step 1, replace “Click Tools. Click Data Analysis.” with: From the Data ribbon, click Data Analysis.
Replace step 3 and add new step 4:
Step 3. Right-click in any empty space within the Line Fit Plot. Click Change Chart Type. From the XY (Scatter) submenu, click on the first option (Scatter with only Markers). Click OK.
Step 4. Right-click on any one of the linearly-arranged points that describe the predicted values and click Delete. Right-click on any of the data points in the scatter diagram and click Add Trendline. In the Trendline Options menu, select the Polynomial of order 2, Display equation on chart, and Display R-squared value on chart options. Click Close. Make formatting adjustments to the chart.

**Computer Solutions 17.2: Fitting a Polynomial Regression Equation, Two Predictor Variables, p. 655**
In step 2, replace “Click Tools. Click Data Analysis.” with: From the Data ribbon, click Data Analysis.

**Computer Solutions 17.3: Multiple Regression With Qualitative Predictor Variables, p. 659**
In step 1, replace “Click Tools. Click Data Analysis.” with: From the Data ribbon, click Data Analysis.
Computer Solutions 17.4: Transformation of the Multiplicative Model, p. 663
In step 2, the second sentence is replaced with: From the **Formulas** ribbon, click the \( f \) (Insert Function) symbol at the left.
In step 4, replace “Click Tools. Click Data Analysis.” with: From the **Data** ribbon, click **Data Analysis**.

Computer Solutions 17.5: The Correlation Matrix, p. 666
In step 1, replace “Click Tools. Click Data Analysis.” with: From the **Data** ribbon, click **Data Analysis**.

Computer Solutions 17.6: Stepwise Regression, p. 669
In step 1, replace “Click Tools. Click Data Analysis Plus.” with: From the **Add-Ins** ribbon, click **Data Analysis Plus**.
If you selected any scatterplots in step 3, these will be displayed on separate sheets within the workbook.

**Chapter 18: Models for Time Series and Forecasting**

Computer Solutions 18.1: Fitting a Linear or Quadratic Trend Equation, p. 689
In step 1, replace “Click Tools. Click Data Analysis.” with: From the **Data** ribbon, click **Data Analysis**.
Replace step 3 and add new step 4:
Step 3. Right-click in any empty space within the Line Fit Plot. Click on **Change Chart Type**. From the **XY (Scatter)** submenu, click on the first option (Scatter with only Markers). Click **OK**.
Step 4. Right-click on any one of the linearly-arranged points that describe the predicted values and click **Delete**. Right-click on any of the data points in the scatter diagram and click **Add Trendline**.
In the **Trendline Options** menu, select either the Linear or the Polynomial (of order 2) equation type. We selected the latter. Select the Display equation on chart option. Click **Close**. Make formatting adjustments to the chart.

Computer Solutions 18.2: Centered Moving Average For Smoothing a Time Series, p. 692
In step 1, replace “Click Tools. Click Data Analysis.” with: From the **Data** ribbon, click **Data Analysis**.
In step 2, replace the sentence within the parentheses with: Do not select Chart Output.
Step 4 becomes: Click on B1 and drag to C16 to select cells B1:C16. From the **Insert** ribbon, click **Line** from the **Charts** menu. From the **2-D Line** menu, click the fourth option (Line with Markers). Make formatting adjustments to the chart.
Computer Solutions 18.3: Excel Centered Moving Average Based On Even Number of Periods, p. 694
In step 1, replace “Click Tools. Click Data Analysis.” with: From the Data ribbon, click Data Analysis.
In step 4, replace “Click Tools. Click Data Analysis.” with: From the Data ribbon, click Data Analysis.
In step 7, delete “to satisfy ChartWizard requirements.”
Add step 8: Click on $B1$ and drag to $C16$ to select cells $B1:C16$. From the Insert ribbon, click Line from the Charts menu. From the 2-D Line menu, click the fourth option (Line with Markers).
Make formatting adjustments to the chart.

Computer Solutions 18.4: Exponentially Smoothing a Time Series, p. 697
In step 1, replace “Click Tools. Click Data Analysis.” with: From the Data ribbon, click Data Analysis.
In step 2, replace the material in parentheses with: Do not select Chart Output.
Step 5 becomes: Click on $B1$ and drag to $D16$ to select cells $B1:D16$. From the Insert ribbon, click Line from the Charts menu. From the 2-D Line menu, click the fourth option (Line with Markers).
Make formatting adjustments to the chart.

Computer Solutions 18.5: Determining Seasonal Indexes, p. 704
Excel using worksheet template, seasonal index for quarters
UNCHANGED
Excel using Data Analysis Plus, seasonal index for quarters
In step 2, replace “Click Tools. Click Data Analysis Plus.” with: From the Add-Ins ribbon, click Data Analysis Plus.
In step 3, after “select Labels,” add: Click OK.

Computer Solutions 18.6: Forecasting With Exponential Smoothing, p. 708
In step 1, replace “Click Tools. Click Data Analysis.” with: From the Data ribbon, click Data Analysis.
In step 2, replace material in parentheses with: Do not select Chart Output.
Step 4 becomes: Click on $B1$ and drag to $C17$ to select cells $B1:C17$. From the Insert ribbon, click Line from the Charts menu. From the 2-D Line menu, click the fourth option (Line with Markers).
Make formatting adjustments to the chart.

Computer Solutions 18.7: Durbin-Watson Test for Autocorrelation, p. 718
In step 1, replace “Click Tools. Click Data Analysis.” with: From the Data ribbon, click Data Analysis.
In step 3, replace “Click Tools. Click Data Analysis Plus.” with: From the Add-Ins ribbon, click Data Analysis Plus.

Computer Solutions 18.8: Autoregressive Forecasting, p. 721
UNCHANGED
Chapter 20: Total Quality Management

Computer Solutions 20.1: Mean Chart, p. 776
In step 1, replace “Click Tools. Click Data Analysis Plus.” with: From the Add-Ins ribbon, click Data Analysis Plus.
Note: The centerline value and the control limits are shown as points on the vertical axis, and they correspond to sample “0.” Ignore the line between the centerline value at sample “0” and the mean value at sample “1.”

Computer Solutions 20.2: Range Chart, p. 779
In step 1, replace “Click Tools. Click Data Analysis Plus.” with: From the Add-Ins ribbon, click Data Analysis Plus.
Note: The centerline value and the control limits are shown as points on the vertical axis, and they correspond to sample “0.” Ignore the line between the centerline value at sample “0” and the range value at sample “1.”

Computer Solutions 20.3: p-Chart, p. 785
In step 1, replace “Click Tools. Click Data Analysis Plus.” with: From the Add-Ins ribbon, click Data Analysis Plus.
Note: The centerline value and the control limits are shown as points on the vertical axis, and they correspond to sample “0.” Ignore the line between the centerline value at sample “0” and the proportion value at sample “1.” Also, in step 2, there are 16 samples, not 20.

Computer Solutions 20.4: c-Chart, p. 788
UNCHANGED