

MOS 2013 Study Guide

Joan Lambert



EXAM 77-420

**Microsoft
Excel**

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Introduction

The Microsoft Office Specialist (MOS) certification program has been designed to validate your knowledge of and ability to use programs in the Microsoft Office 2013 suite of programs, Microsoft Office 365, and Microsoft SharePoint. This book has been designed to guide you in studying the types of tasks you are likely to be required to demonstrate in Exam 77-420: Microsoft Excel 2013.

See Also For information about the tasks you are likely to be required to demonstrate in Exams 77-427 and 77-428: Microsoft Excel 2013 Expert, see *MOS 2013 Study Guide for Microsoft Excel Expert* by Mark Dodge (Microsoft Press, 2013).

Who this book is for

MOS 2013 Study Guide for Microsoft Excel is designed for experienced computer users seeking Microsoft Office Specialist certification in Excel 2013.

MOS exams for individual programs are practical rather than theoretical. You must demonstrate that you can complete certain tasks or projects rather than simply answering questions about program features. The successful MOS certification candidate will have at least six months of experience using all aspects of the application on a regular basis; for example, using Excel at work or school to create and manage workbooks and worksheets, modify and format cell content, present data in tables and charts, perform calculations on data, and insert and format objects in a worksheet.

As a certification candidate, you probably have a lot of experience with the program you want to become certified in. Many of the procedures described in this book will be familiar to you; others might not be. Read through each study section and ensure that you are familiar with not only the procedures included in the section, but also the concepts and tools discussed in the review information. In some cases, graphics depict the tools you will use to perform procedures related to the skill set. Study the graphics and ensure that you are familiar with all the options available for each tool.

How this book is organized

The exam coverage is divided into chapters representing broad skill sets that correlate to the functional groups covered by the exam, and each chapter is divided into sections addressing groups of related skills that correlate to the exam objectives. Each section includes review information, generic procedures, and practice tasks you can complete on your own while studying. When necessary, we provide practice files you can use to work through the practice tasks. You can practice the procedures in this book by using the practice files supplied or by using your own files.

Throughout this book, you will find Strategy tips that present information about the scope of study that is necessary to ensure that you achieve mastery of a skill set and are successful in your certification effort.

Download the practice files

Before you can complete the practice tasks in this book, you need to download the book's practice files to your computer. These practice files can be downloaded from the following page:

<http://aka.ms/mosExcel2013/files>

Important The Excel 2013 program is not available from this website. You should purchase and install that program before using this book.

If you would like to be able to refer to the completed versions of practice files at a later time, you can save the practice files that you modify while working through the exercises in this book. If you save your changes and later want to repeat the exercise, you can download the original practice files again. The following table lists the practice files for this book.

Folder and chapter	Files
MOSExcel2013\Objective1	<i>Excel_1-1.xlsx</i>
1 Create and manage workbooks and worksheets	<i>Excel_1-2a.xlsx</i>
	<i>Excel_1-2b.xlsx</i>
	<i>Excel_1-3a.xlsx</i>
	<i>Excel_1-3b.xlsx</i>
	<i>Excel_1-3c.xlsx</i>
	<i>Excel_1-3d.xlsx</i>

Folder and chapter	Files
MOSExcel2013\Objective1 (<i>continued</i>)	<i>Excel_1-4a.xlsx</i>
1 Create and manage workbooks and worksheets	<i>Excel_1-4b.xlsx</i>
	<i>Excel_1-4c.xlsx</i>
	<i>Excel_1-5a.xlsx</i>
	<i>Excel_1-5b.xlsm</i>
MOSExcel2013\Objective2	<i>Excel_2-1a.xlsx</i>
2 Manage cells and ranges	<i>Excel_2-1b.xlsx</i>
	<i>Excel_2-1c.xlsx</i>
	<i>Excel_2-1d.xlsx</i>
	<i>Excel_2-2a.xlsx</i>
	<i>Excel_2-2b.xlsx</i>
	<i>Excel_2-3a.xlsx</i>
	<i>Excel_2-3b.xlsx</i>
	<i>Excel_2-3c.xlsx</i>
	<i>Excel_2-3d.xlsx</i>
	<i>Excel_2-3e.xlsx</i>
MOSExcel2013\Objective3	<i>Excel_3-1.xlsx</i>
3 Manage tables	<i>Excel_3-2.xlsx</i>
	<i>Excel_3-3a.xlsx</i>
	<i>Excel_3-3b.xlsx</i>
MOSExcel2013\Objective4	<i>Excel_4-1a.xlsx</i>
4 Apply formulas and functions	<i>Excel_4-1b.xlsx</i>
	<i>Excel_4-1c.xlsx</i>
	<i>Excel_4-2a.xlsx</i>
	<i>Excel_4-2b.xlsx</i>
	<i>Excel_4-3.xlsx</i>
	<i>Excel_4-4.xlsx</i>
MOSExcel2013\Objective5	<i>Excel_5-1a.xlsx</i>
5 Create charts and objects	<i>Excel_5-1b.xlsx</i>
	<i>Excel_5-1c.xlsx</i>
	<i>Excel_5-2a.xlsx</i>
	<i>Excel_5-2b.xlsx</i>
	<i>Excel_5-2c.xlsx</i>
	<i>Excel_5-3a.xlsx</i>
	<i>Excel_5-3b.png</i>
	<i>Excel_5-3c.txt</i>
	<i>Excel_5-3d.jpg</i>

Adapting exercise steps

The screen images shown in this book were captured at a screen resolution of 1024 × 768, at 100 percent magnification. If your settings are different, the ribbon on your screen might not look the same as the one shown in this book. For example, you might have more or fewer buttons in each of the groups, the buttons you have might be represented by larger or smaller icons than those shown, or the group might be represented by a button that you click to display the group's commands. As a result, exercise instructions that involve the ribbon might require a little adaptation. Our instructions use this format:

→ On the **Insert** tab, in the **Illustrations** group, click the **Chart** button.

If the command is in a list or on a menu, our instructions use this format:

→ On the **Home** tab, in the **Editing** group, click the **Find** arrow and then, on the **Find** menu, click **Advanced Find**.

Tip On subsequent instances of instructions located on the same tab or in the same group, the instructions are simplified to reflect that we've already established the working location.

If differences between your display settings and ours cause a button to appear differently on your screen than it does in this book, you can easily adapt the steps to locate the command. First click the specified tab, and then locate the specified group. If a group has been collapsed into a group list or under a group button, click the list or button to display the group's commands. If you can't immediately identify the button you want, point to likely candidates to display their names in ScreenTips.

If you prefer not to have to adapt the steps, set up your screen to match ours while you read and work through the exercises in this book.

In this book, we provide instructions based on the traditional keyboard and mouse input methods. If you're using the program on a touch-enabled device, you might be giving commands by tapping with a stylus or your finger. If so, substitute a tapping action any time we instruct you to click a user interface element. Also note that when we tell you to enter information, you can do so by typing on a keyboard, tapping an on-screen keyboard, or even speaking aloud, depending on your computer setup and your personal preferences.

Get support and give feedback

The following sections provide information about getting help with this book and contacting us to provide feedback or report errors.

Errata

We've made every effort to ensure the accuracy of this book and its companion content. Any errors that have been reported since this book was published are listed on our Microsoft Press site:

<http://aka.ms/mosExcel2013/errata>

If you find an error that is not already listed, you can report it to us through the same page.

If you need additional support, send an email message to Microsoft Press Book Support at:

mspinput@microsoft.com

Please note that product support for Microsoft software is not offered through the preceding addresses.

We want to hear from you

At Microsoft Press, your satisfaction is our top priority, and your feedback our most valuable asset. Please tell us what you think of this book at:

<http://www.microsoft.com/learning/booksurvey>

The survey is short, and we read every one of your comments and ideas. Thanks in advance for your input!

Stay in touch

Let's keep the conversation going! We're on Twitter at:

<http://twitter.com/MicrosoftPress>

Taking a Microsoft Office Specialist exam

Desktop computing proficiency is increasingly important in today's business world. When screening, hiring, and training employees, employers can feel reassured by relying on the objectivity and consistency of technology certification to ensure the competence of their workforce. As an employee or job seeker, you can use technology certification to prove that you already have the skills you need to succeed, saving current and future employers the time and expense of training you.

Microsoft Office Specialist certification

Microsoft Office Specialist certification is designed to assist employees in validating their skills with Office programs. The following certification paths are available:

- A Microsoft Office Specialist (MOS) is an individual who has demonstrated proficiency by passing a certification exam in one or more Office programs, including Microsoft Word, Excel, PowerPoint, Outlook, Access, OneNote, or SharePoint.
- A Microsoft Office Specialist Expert (MOS Expert) is an individual who has taken his or her knowledge of Office to the next level and has demonstrated by passing a certification exam that he or she has mastered the more advanced features of Word or Excel.

Selecting a certification path

When deciding which certifications you would like to pursue, you should assess the following:

- The program and program version(s) with which you are familiar
- The length of time you have used the program and how frequently you use it
- Whether you have had formal or informal training in the use of that program
- Whether you use most or all of the available program features
- Whether you are considered a go-to resource by business associates, friends, and family members who have difficulty with the program

Candidates for MOS-level certification are expected to successfully complete a wide range of standard business tasks, such as formatting a document or worksheet and its content; creating and formatting visual content; or working with SharePoint lists, libraries, Web Parts, and dashboards. Successful candidates generally have six or more months of experience with the specific Office program, including either formal, instructor-led training or self-study using MOS-approved books, guides, or interactive computer-based materials.

Candidates for MOS Expert-level certification are expected to successfully complete more complex tasks that involve using the advanced functionality of the program. Successful candidates generally have at least six months, and might have several years, of experience with the programs, including formal, instructor-led training or self-study using MOS-approved materials.

Test-taking tips

Every MOS certification exam is developed from a set of exam skill standards (referred to as the objective domain) that are derived from studies of how the Office programs are used in the workplace. Because these skill standards dictate the scope of each exam, they provide critical information about how to prepare for certification. This book follows the structure of the published exam objectives; see “How this book is organized” in the Introduction for more information.

The MOS certification exams are performance based and require you to complete business-related tasks or projects in the program for which you are seeking certification. For example, you might be presented with a file and told to do something specific with it, or presented with a sample document and told to create it by using resources provided for that purpose. Your score on the exam reflects how well you perform the requested tasks or complete the project within the allotted time.

Here is some helpful information about taking the exam:

- Keep track of the time. Your exam time does not officially begin until after you finish reading the instructions provided at the beginning of the exam. During the exam, the amount of time remaining is shown at the bottom of the exam interface. You can't pause the exam after you start it.
- Pace yourself. At the beginning of the exam, you will receive information about the questions or projects that are included in the exam. Some questions will require that you complete more than one task. Each project will require that you complete multiple tasks. During the exam, the amount of time remaining to complete the questions or project, and the number of completed and remaining questions if applicable, is shown at the bottom of the exam interface.

- Read the exam instructions carefully before beginning. Follow all the instructions provided completely and accurately.
- Enter requested information as it appears in the instructions, but without duplicating the formatting unless you are specifically instructed to do so. For example, the text and values you are asked to enter might appear in the instructions in bold and underlined text, but you should enter the information without applying these formats.
- Close all dialog boxes before proceeding to the next exam question unless you are specifically instructed not to do so.
- Don't close task panes before proceeding to the next exam question unless you are specifically instructed to do so.
- If you are asked to print a document, worksheet, chart, report, or slide, perform the task, but be aware that nothing will actually be printed.
- When performing tasks to complete a project-based exam, save your work frequently.
- Don't worry about extra keystrokes or mouse clicks. Your work is scored based on its result, not on the method you use to achieve that result (unless a specific method is indicated in the instructions).
- If a computer problem occurs during the exam (for example, if the exam does not respond or the mouse no longer functions) or if a power outage occurs, contact a testing center administrator immediately. The administrator will restart the computer and return the exam to the point where the interruption occurred, with your score intact.

Strategy This book includes special tips for effectively studying for the Microsoft Office Specialist exams in Strategy paragraphs such as this one.

Certification benefits

At the conclusion of the exam, you will receive a score report, indicating whether you passed the exam. If your score meets or exceeds the passing standard (the minimum required score), you will be contacted by email by the Microsoft Certification Program team. The email message you receive will include your Microsoft Certification ID and links to online resources, including the Microsoft Certified Professional site. On this site, you can download or order a printed certificate, create a virtual business card, order an ID card, view and share your certification transcript, access the Logo Builder, and access other useful and interesting resources, including special offers from Microsoft and affiliated companies.

Depending on the level of certification you achieve, you will qualify to display one of three logos on your business card and other personal promotional materials. These logos attest to the fact that you are proficient in the applications or cross-application skills necessary to achieve the certification.

Microsoft **Microsoft** **Microsoft**
Office Specialist Office Specialist Expert Office Specialist Master

Using the Logo Builder, you can create a personalized certification logo that includes the MOS logo and the specific programs in which you have achieved certification. If you achieve MOS certification in multiple programs, you can include multiple certifications in one logo.

For more information

To learn more about the Microsoft Office Specialist exams and related courseware, visit:

<http://www.microsoft.com/learning/en/us/mos-certification.aspx>

Exam 77-420

Microsoft Excel 2013

This book covers the skills you need to have for certification as a Microsoft Office Specialist in Microsoft Excel 2013. Specifically, you will need to be able to complete tasks that demonstrate the following skills:

- 1** Create and manage workbooks and worksheets
 - 2** Manage cells and ranges
 - 3** Create tables
 - 4** Apply formulas and functions
 - 5** Create charts and objects
-

With these skills, you can create, populate, format, and manage the types of workbooks and workbook content most commonly used in a business environment.

Prerequisites

We assume that you have been working with Excel 2013 for at least six months and that you know how to carry out fundamental tasks that are not specifically mentioned in the objectives for this Microsoft Office Specialist exam. Before you begin studying for this exam, you might want to make sure you are familiar with the information in this section.