Microsoft

MOS 2016
Study Guide

John Pierce

EXAM 77-730

Microsoft Access

Microsoft

MOS 2016 Study Guide for Microsoft Access

John Pierce

Microsoft Office Specialist

Exam 77-730

MOS 2016 Study Guide for Microsoft Access
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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 2016 suite of programs. This book has been designed to guide you in studying the types of tasks you are likely to be required to demonstrate in Exam 77-730, "Access 2016: Core Database Management, Manipulation, and Query Skills."

Who this book is for

MOS 2016 Study Guide for Microsoft Access is designed for experienced computer users seeking Microsoft Office Specialist certification in Access 2016.

MOS exams for individual programs are practical rather than theoretical. You must demonstrate that you can complete certain tasks or projects rather than simply answer questions about program features. The successful MOS certification candidate will have at least six months of experience using all aspects of the program on a regular basis; for example, using Access at work or school to create and manage databases, build database tables, import and export data, design and run queries, create and format forms, and design detail and summary reports.

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 the procedures, concepts, and tools discussed. In some cases, images depict the tools you will use to perform procedures related to the skill set. Study the images and ensure that you are familiar with 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. 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. We provide practice files you can use to work through the practice tasks and result files you can use to check your work. You can practice the generic procedures in this book by using the practice files supplied or by using your own files.

Throughout this book, you will find Exam 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 copy the book's practice files and result files to your computer. Download the compressed (zipped) folder from the following page, and extract the files from it to a folder (such as your Documents folder) on your computer:

https://aka.ms/MOSAccess2016/downloads

IMPORTANT The Access 2016 program is not available from this website. You should purchase and install that program before using this book.

You will save the completed versions of practice files that you modify while working through the practice tasks in this book. If you later want to repeat the practice tasks, you can download the original practice files again.

The following table lists the practice files provided for this book.

Folder and objective group	Practice files	Result files
MOSAccess2016\Objective1 Create and manage databases	Access_1-1.xlsx Access_1-2.accdb Access_1-3.accdb Access_1-4.accdb Access_1-5.accdb	Access_1-1_results.accdb Access_1-2_results.accdb Access_1-3_results.accdb Access_1-4_results.accdb Access_1-5_results.accdb
MOSAccess2016\Objective2 Build tables	Access_2-1a.accdb Access_2-1b.accdb Access_2-1c.txt Access_2-1d.accdb Access_2-2.accdb Access_2-3a.accdb Access_2-3b.xlsx Access_2-4.accdb	Access_2-1_results.accdb Access_2-2_results.accdb Access_2-3_results.accdb Access_2-4_results.accdb
MOSAccess2016\Objective3 Create queries	Access_3-1.accdb Access_3-2.accdb Access_3-3.accdb	Access_3-1_results.accdb Access_3-2_results.accdb Access_3-3_results.accdb
MOSAccess2016\Objective4 Create forms	Access_4-1.accdb Access_4-2.accdb Access_4-3.accdb Access_4-3a.png	Access_4-1_results.accdb Access_4-2_results.accdb Access_4-3_results.accdb
MOSAccess2016\Objective5 Create reports	Access_5-1.accdb Access_5-2.accdb Access_5-3.accdb	Access_5-1_results.accdb Access_5-2_results.accdb Access_5-3_results.accdb

Adapt procedure steps

This book contains many images of user interface elements that you'll work with while performing tasks in Access on a Windows computer. Depending on your screen resolution or program window width, the Access ribbon on your screen might look different from that shown in this book. (If you turn on Touch mode, the ribbon displays significantly fewer commands than in Mouse mode.) As a result, procedural instructions that involve the ribbon might require a little adaptation.

Simple procedural instructions use this format:

➜ On the **Home** tab, in the **Sort & Filter** group, click the **Filter** button.

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

➜ On the **Home** tab, in the **Sort & Filter** group, click **Advanced Filter Options** and then, in the **Advanced Filter Options** list, click **Filter By Form**.

If differences between your display settings and ours cause a button to appear differently on your screen from how 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.

The instructions in this book assume that you're interacting with on-screen elements on your computer by clicking (with a mouse, touchpad, or other hardware device). If you're using a different method—for example, if your computer has a touchscreen interface and you're tapping the screen (with your finger or a stylus)—substitute the applicable tapping action when you interact with a user interface element.

Instructions in this book refer to user interface elements that you click or tap on the screen as buttons, and to physical buttons that you press on a keyboard as keys, to conform to the standard terminology used in documentation for these products.

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https://aka.ms/MOSAccess2016/detail

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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 students and information workers 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, or Access.
- 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 Core and Expert certification exams that he or she has mastered the more advanced features of Word or Excel.
- A Microsoft Office Specialist Master (MOS Master) is an individual who has demonstrated a broader knowledge of Office skills by passing the Word Core and Expert exams, the Excel Core and Expert exams, the PowerPoint exam, and the Access or Outlook exam.

Selecting a certification path

When deciding which certifications you would like to pursue, 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 certification are expected to successfully complete a wide range of standard business tasks. 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 and MOS Master 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 Also For more information about the book structure, see "How this book is organized" in the introduction.

The MOS certification exams are performance based and require you to complete business-related tasks in the program for which you are seeking certification. For example, you might be presented with a document and told to insert and format additional document elements. Your score on the exam reflects how many of the requested tasks you complete 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 in the exam instruction window. You can't pause the exam after you start it.
- Pace yourself. At the beginning of the exam, you will receive information about the tasks that are included in the exam. During the exam, the number of completed and remaining tasks is shown in the exam instruction window.
- Read the exam instructions carefully before beginning. Follow all the instructions provided completely and accurately.
- If you have difficulty performing a task, you can restart it without affecting the result of any completed tasks, or you can skip the task and come back to it after you finish the other tasks on the exam.
- 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 item unless you are specifically instructed not to do so.
- Don't close task panes before proceeding to the next exam item 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.
- 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.

Exam Strategy This book includes special tips for effectively studying for the Microsoft Office Specialist exams in Exam 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, review 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. 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.certiport.com/mos

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Microsoft Office Specialist

Exam 77-730

Access 2016: Core Database Management, Manipulation, and Query Skills

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This book covers the skills you need to have for certification as a Microsoft Office Specialist in Access 2016. Specifically, you need to be able to complete tasks that demonstrate the following skills:

1. Create and manage databases
2. Build tables
3. Create queries
4. Create forms
5. Create reports

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

Prerequisites

We assume that you have been working with Access 2016 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.

The certification exam and the content of this book address the processes of designing and building Access databases. We assume that you are familiar with the Microsoft Office ribbon and that you understand basic Access features—for example, that you know how to enter and edit data. We also assume you are familiar with the definition and function of relational databases and database objects such as tables and forms. To provide context and an opportunity for review, the following list provides brief explanations of five important terms:

- **Table** Defines the data stored in a database. Tables are composed of fields, and each field is defined as a specific data type (text, number, date, or another data type). Each field also has certain properties. For example, you can specify that a field is required. You can also define the size of a field (such as the maximum number of characters a field can contain). Users of a database fill in fields (and must fill in required fields) with values to create a record in the database. In most tables, each record is identified by a unique value called a *primary key*, which might be a single field (such as a product ID) or a combination of fields.
- **Relationship** Helps maintain the integrity of the information in a database and reduce data redundancy. You can create several types of relationships between tables in an Access database. In a one-to-many relationship, a record in one table can be related to one or many records in another. You can also create one-to-one relationships and many-to-many relationships. Relationships are created by linking a table's foreign key (such as a customer ID field in an order table) with another table's primary key (the customer ID field in the customer table). Relationships protect data integrity by preventing you from creating orphan records (for example, an order with no customer). Relationships help reduce data redundancy by letting you store information in separate tables that you link together. For example, you can create a customer table and then relate each order in an order table to the record for a specific customer. This prevents you from having to enter a custom record for each separate order.

- **Query** Can be used to select records that meet specific criteria and to perform actions such as updating a group of records. To build a select query, you add fields from one or more tables and then define criteria that Access uses to retrieve the records you want to view. For example, you might want to retrieve records with a certain value in a date field (all records created after 1/1/2017, for example) or records associated with a specific project. Using criteria, you can also create and run action queries that insert, update, or delete selected records.
- **Form** Used to display, enter, and edit data. Forms are often bound to tables (or to queries) that serve as the form's record source. Forms use controls such as text boxes, check boxes, and list boxes to provide a user interface for a database. Forms can also be used to confirm and execute database operations and to navigate from one database object to another. Access provides several built-in form designs, a gallery of form controls, and tools you use to design and lay out a form.
- **Report** Used to share and present data and to summarize data for a specific field or fields. You might print reports for a meeting or distribute them electronically as PDF files or in email.

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