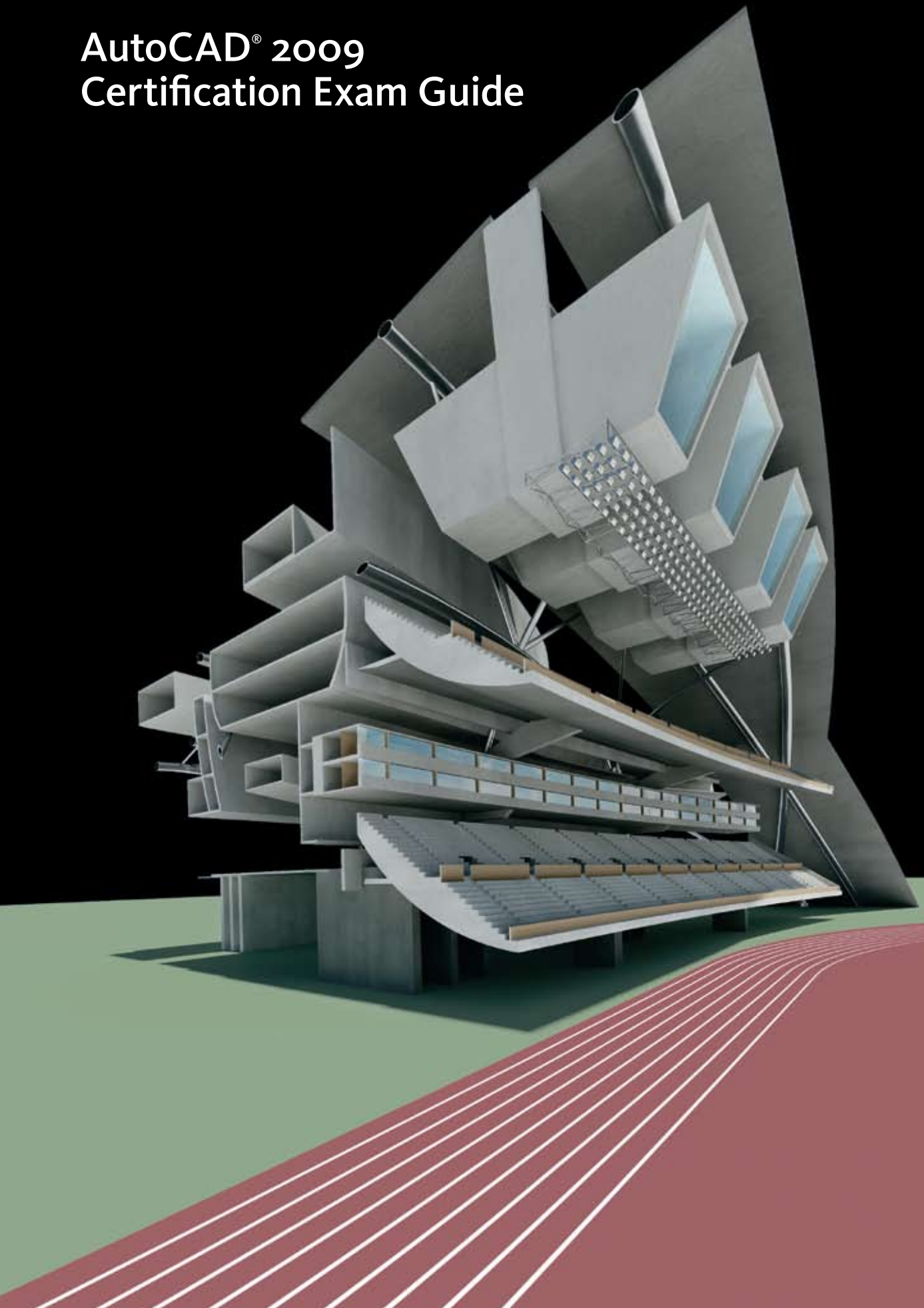


AutoCAD® 2009 Certification Exam Guide



Autodesk®

AutoCAD® 2009 Certification Exam Guide

Preparation Guide for AutoCAD 2009 Certified Associate and AutoCAD 2009 Certified Professional Certification Exams

This guide is intended as a resource in your preparation for the exams to become Autodesk-certified. It will help you understand the structure and content of the exams. It also will help you develop a personal strategy to successfully pass the AutoCAD 2009 Certified Associate and Certified Professional exams. The guide includes information on recertification from AutoCAD 2008 Certified User.

About Autodesk Professional Certification

Autodesk certifications are industry-recognized credentials that can help you succeed in your design career—providing benefits to both you and your employer. Autodesk certifications are a reliable validation of skills and knowledge, and can lead to accelerated professional development, improved productivity, and enhanced credibility.

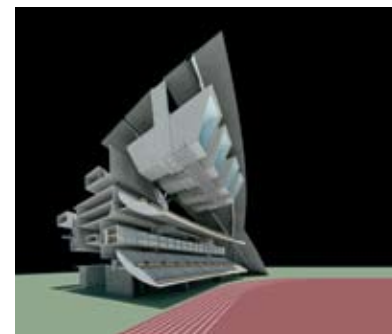
Getting Certified

To earn Autodesk certification, you must pass the required Autodesk certification exams. Stepping through each of these areas will help to ensure your success:

- Step 1.** Choose the certification that's right for you: Choose the level and the Autodesk application that best applies to you. Understand the requirements for the certification you want to earn.
- Step 2.** Assess your readiness and take a practice test: Take an assessment test to assess your knowledge of the product. And then take a practice test for the Professional-level exam to gain experience using the testing system.
- Step 3.** Get the training you need: Use AOTC courseware preparation guides, or take classes at an Autodesk Authorized Training Center (ATC®).
- Step 4.** Apply your training and practice your skills: Practice what you've learned to gain experience.
- Step 5.** Take the required exam: Register for your exam at an Autodesk Authorized Certification Center.

Autodesk Certification Centers

When you have stepped through the process above, you will take your certification exam at an Autodesk Certification Center. All exams are computer-delivered in a proctored environment. Center proctors will seat you and help familiarize you with the testing system. You can find the locations of Autodesk Certification Centers near you using the Center Search function on <http://autodesk.starttest.com>.



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Exam Registration, Purchasing, and Scheduling

Information on purchasing and scheduling an Autodesk certification exam can be found at Autodesk Online at <http://autodesk.starttest.com>.

When you participate in the Autodesk Certification Program, you will be asked to create a profile in the Autodesk Online testing system, which includes creating a user name and password. You will be prompted to create this profile the first time you start a test using the Autodesk Online system. While creating your profile, you will be asked to agree to Autodesk's Terms and Conditions.



During Your Exam

While taking the exam, you may not use calculators, books, or other electronic equipment. You may use scratch paper, but it will be collected from you when you finish your test. You may pause the test during delivery, and no time will be lost. The proctor will seat you and step you through the process of starting your test. The proctor also will answer any questions you have about the testing process. The proctor will not answer any questions about test questions.

Exam Preparation—Your Key to Success

Autodesk highly recommends using a variety of resources to prepare for certification exams. In all cases, you should start with the exam objectives to determine which tasks will be covered on the exams. Equally as important, actual hands-on experience is required. From there, we recommend that you choose the preparation option that best fits your needs. Details on Autodesk-recommended preparation solutions are available in this guide.

During preparation, it is important that you review the exam objectives periodically to make sure that all of the material in the exam is covered in your choice of preparation methods. Please note that some material on the test may not be covered in your choice of preparation materials. This is why it is critical that you refer to the list of exam objectives during your course of study.

Exam Objectives

Review the exam objectives to see the complete listing of topics for the exam. Use this as your checklist to determine your weaknesses and areas on which you will want to focus more attention in your study and preparation. The exam objectives can be found on the last two pages of this guide.

Experience

Actual hands-on experience is a critical component in preparing for the exam. Direct application of the skills learned cannot be substituted by any one other learning resource. You must spend time using the product and applying the skills you have learned. Certification exams are looking to measure how well you know how to perform tasks, not how well you memorize features and functions. Wherever possible, we recommend the use of a Practice Exam to prepare for testing. This will allow you to become familiar with the exam testing interface and system.

Preparation Matters

Even the most experienced users of Autodesk applications will benefit from focusing their study on the objectives outlined in this guide. Studies have shown that candidates who prepare using objectives and a variety of resources score better on certification exams.

Solid preparation, including regularly scheduled preparation time, along with your experience can equal success.

Exam Preparation Solutions

AutoCAD 2009 Certified Associate Exam Summary Information

The AutoCAD 2009 Certified Associate Exam is an on-line examination consisting of 30 questions that assess your knowledge of the tools, features, and common tasks in AutoCAD 2009. Question types include multiple choice, matching, and point-and-click (hotspot). The required passing score is 70%.

The exam has a one-hour time limit. (In some countries, the time limit may be extended.) At the conclusion of the exam, you will receive a comprehensive score report that includes summary information on the questions you missed and where you can find information on that area in the corresponding Autodesk Official Training Courseware (AOTC). Your score report remains available in your profile in the Autodesk Online system at <http://autodesk.starttest.com>. These results are confidential.

AutoCAD 2009 Certified Professional Exam Summary Information

The AutoCAD 2009 Certified Professional Exam is a performance-based test. Performance-based testing is defined as testing by doing. That means that rather than answer questions about how you might accomplish a task, you actually perform the task. Performance-based testing is widely accepted as a better way of ensuring you have the skills needed for the application, rather than just the ability to recall information.

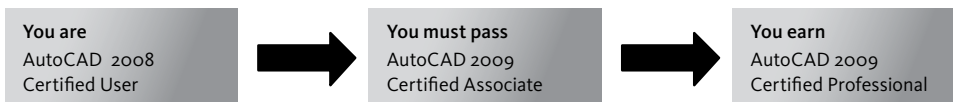
The AutoCAD 2009 Certified Professional Exam is comprised of 20 questions. The exam requires you to use AutoCAD 2009 to perform a task, and then answer a question about the task. The questions will ask you to input a numeric or text answer. More information on these types of questions, along with sample questions, can be found in this guide. The required passing score is 80%.

To earn the credential of AutoCAD Certified Professional, you also must pass the AutoCAD Certified Associate Exam. You can pass the exams in any order.

The exam has a 90-minute time limit. (In some countries, the time limit may be extended.) At the conclusion of the exam, you will receive a comprehensive score report that includes summary information on the questions you missed and where you can find information on that area in the corresponding Autodesk Official Training Courseware (AOTC). Your score report remains available in your profile in the Autodesk Online system at <http://autodesk.starttest.com>. These results are confidential.

Recertification from AutoCAD 2008 Certified User

If you are an AutoCAD 2008 Certified User, you can update your certification to AutoCAD 2009 Certified Professional by passing the AutoCAD 2009 Certified Associate Exam as illustrated below. This applies only to recertification from 2008 to 2009. If you are certified on an earlier release, you will have to take both the Certified Associate and Certified Professional exams to earn 2009 Certified Professional certification.



Recommended Experience Levels for AutoCAD 2009 Certification Exams

Experience using an Autodesk application is a critical component of success in earning certification. Autodesk recommends a minimum level of experience using the application before attempting the exam. Note that even with the recommended level of experience, you should still use the exam objectives as a basis for your preparation. Even the most knowledgeable and experienced users of Autodesk applications will need to focus their study specifically on the exam objectives.

2009 Certified Associate Exam

AOTC Essentials course (or equivalent) plus 100 hours of hands-on application.

2009 Certified Professional Exam

AOTC Essentials course (or equivalent) plus 400 hours of hands-on application.

Looking to become an AutoCAD 2009 Certified Professional?

Remember, you must also pass the AutoCAD 2009 Certified Associate Exam. Take them in any order.

Certification Preparation Solutions

Autodesk Assessment Tests

Autodesk assessment tests will help determine your general knowledge of the Autodesk application on which you are seeking certification. This will identify areas of knowledge that you should develop in order to prepare for the certification exam. 2009 assessment tests consist of 50 to 60 questions that assess your knowledge of the tools, features, and common tasks in AutoCAD 2009. At the completion of an Autodesk assessment test, you will receive a comprehensive score report that details the number of questions you missed and provides feedback on improving your performance in those areas. You also will be able to review the items you missed and their correct answers.



Autodesk Official Training Courseware (AOTC)

Autodesk publishes dozens of courseware titles every year designed to help users at all levels of expertise improve their productivity with Autodesk software. Courseware from Autodesk is the preferred classroom training material for Autodesk Authorized Training Centers. The same training materials are well-suited for self-paced, standalone learning. Students simulate real-world projects and work through hands-on, job-related exercises. Most titles include a trial version of the software.

The objectives in the Autodesk Certified Associate and Professional exams come directly from AOTC courseware. If you will be taking a Professional-level exam, the test questions will use the drawings that are made available to you with the corresponding AOTC courseware. AOTC courseware can be purchased from the Autodesk Store at <http://store.autodesk.com> (select “Training Tools,” and then “Autodesk Courseware”).

The recommended AOTC courseware for the Associate and Professional exams is AutoCAD 2009 / AutoCAD LT 2009: Essentials AOTC. You can purchase the courseware at <http://store.autodesk.com> or contact your local ATC.

ATC® Instructor-Led Courses

Every day, thousands of customers are taught how to realize their ideas, faster, with Autodesk software. You can perform smarter and better with Autodesk software products when you turn to an Authorized Training Center. An ATC is your best source for Autodesk-authorized classes, tailored to meet the needs and challenges facing today’s design professionals, and to help you prepare for your Autodesk certification exams.

The Autodesk Authorized Training Center (ATC®) program is a global network of professional training providers offering a broad range of learning resources. In many areas, you can earn continuing education credits while building your toolset. Visit the online ATC locator at <http://www.autodesk.com/atc>.

With great instructors, quiet classrooms, and personally dedicated computers, ATC sites get you up to speed quickly—using sample projects and exercises that emphasize real-world, practical applications. It’s the best way to learn how to use Autodesk products and solutions. ATC sites offer all the courses you need in one place. Instructors cover a wide range of Autodesk products, including the latest software releases, for users at all levels.

Need the Autodesk Application?

If you do not have the required Autodesk application on your computer, you will not be able to take the Professional-level practice test from that computer. We recommend you contact an Autodesk Certification Center in your area to schedule a Professional-level practice test where the application is available. In some cases, Autodesk makes available evaluation copies of Autodesk applications, and these can be downloaded and used to prepare for the exam. For information on which products may be available for evaluation, visit the Autodesk product pages at <http://www.autodesk.com/products>, and click “Alphabetical Product List” to see the listing of products with “Free Trial” available. Be sure to read the Terms and Conditions for using these trial products.

Trial Versions

Most AOTC courseware guides come with a trial version of the application. You can use this version to practice, and to take a Professional-level practice test. Find more information at <http://store.autodesk.com>.

AutoCAD 2009 Professional-level Practice Tests

In order to allow you to gain experience with the Professional-level test and the testing system, Autodesk has developed a practice test that simulates the actual 2009 Certified Professional certification exam. It is a performance-based exam, with the same number of questions as the actual exam. It requires the use of the specific Autodesk application in order to successfully answer the questions. This test can be taken in an Autodesk Certification Center or from your own computer.

Other Learning Resources

Other learning resources available from Autodesk include online tutorials, how-to articles, and tips on using features in Autodesk applications. For information on access to these materials, visit the Autodesk product pages at <http://www.autodesk.com/products>, and select the Autodesk application on which you are seeking certification. Each product page contains links to other preparation products that can add to your knowledge.

Test-Taking Strategies

Each time you take a test, whether it is an assessment test, practice test, or the certification exam, you will benefit from using proven test-taking strategies to increase your odds of success. Some of these strategies are general, but some are very specific to the type of exam you may be taking.

Time Management

Because Autodesk certification exams are timed, management of time during testing is an integral part of a successful outcome. Autodesk recommends that you use a strategy that maximizes the time available so that you will have time to answer each exam question. The Autodesk Online test system allows you to mark questions for review and return to them later. This allows you to work through the test questions that are easy or quick for you and mark the more difficult questions to return to later if time permits. It is important to avoid becoming caught up in one specific exam question and wasting time.

Thoroughly Read Exam Questions and Instructions

Autodesk exams are testing specific objectives, so it is critical that you understand the questions before you answer them. Additionally, before each test, you are presented with a tutorial. This tutorial contains information on using the Autodesk Online testing system as well as critical information such as location of files, instructions for answering questions, and general test information.

Associate-Level Exam Question Types

Associate-level exams are made up of a variety of question types that are detailed below. During the tutorial before your test, you will be given information on these question types as well as the opportunity to practice answering them.

- One-best-answer multiple choice—This is the traditional, most familiar type of test question. It requires you to select the single best answer.
- Select all that apply—These questions consist of a question followed by multiple responses in which you select all options that apply.
- Point-and-click—These questions consist of a question followed by a graphic. The correct answer is selected by clicking on the correct area of the graphic.
- Matching format—These questions consist of a list of statements in the left column that are matched to the correct statement in the column on the right. To match statements, you click a statement in the list on the left and drag the statement to the corresponding statement on the right column.

Autodesk Communities

Autodesk Communities can be a great resource for seeking advice on specific exam objectives. These online discussion forums allow you to interact with your peers and ask technical questions. You can find a list of Autodesk Communities at <http://www.autodesk.com> (select “Communities”).

Test-Taking Strategies for Beginners

Good general test-taking strategies that may help you perform better include:

- Be sure you are rested and do not test while hungry.
- If you are travelling to a Certification Center, leave early enough so you will not feel rushed.
- Breathe and relax during your test.
- Take a break if you need to. The system will allow you to pause without losing any time.
- Do a short, focused review before the test.

Professional-Level Exam Question Types

Professional-level exam questions are performance-based and require the use of the Autodesk application to derive the correct answer. Each question requires you to use the Autodesk application to create or modify a data file, and then to type your answer into an input box on the screen. The answer you enter will either be a text entry or a numeric value.

If you are entering a word, phrase, or numeric value, enter the answer exactly as it appears in your data file or in the Autodesk application. If you are entering a numeric value, you may copy and paste from the application. If you are testing in a country that uses a comma in numeric measurements, the testing system will accept the comma as well as the decimal point.

Entering a Text Answer

This type of question presents a scenario that requires you to open a data file and perform a common task. For a question that requires a text answer, enter the text exactly as it appears on the screen.

Example:



1. Open the file named **Displaying Objects.dwg**. Use the zoom and pan features to display room number **82007**.
This room is named:



When you open the data file and then zoom and pan to display this portion of the drawing, the name of the room appears as **DATA RM.**, as upper case letters with a period at the end of the name.

In this case, you would enter the answer as:

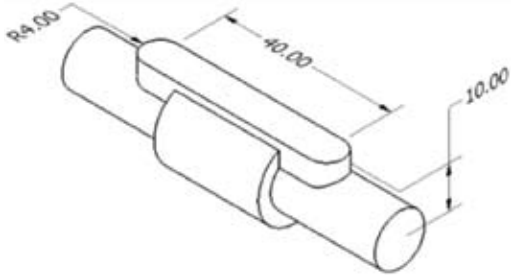
Additional Tips for Professional-Level Exams

- Read the question carefully so that you fully understand the performance task.
- The exam has a time limit. If you encounter a question you cannot answer in a reasonable amount of time, use the Save As feature to save a copy of the data file, and mark the question for review. When you review the question, open your copy of the data file and complete the performance task. After you verify that you have entered the answer correctly, unmark the question so it no longer appears as marked for review.
- Use the Review screen to ensure you have reviewed all the questions you may have marked for review. When you are confident that you have answered all questions, end the examination to submit your answers for scoring. You will receive a score report once you have submitted your answers.

Entering a Numeric Answer

This type of question presents a scenario that requires you to open a data file, modify the object, and identify a value. For a question that requires a numeric answer, enter the value exactly as it appears on the screen.

Example:



Open file **Control-Valve.ipt**. Follow these steps:

1.	Create an offset work plane 10 millimeters from the XY origin plane.
2.	Create the slot feature as shown. The slot is centered in middle of the existing features. What is the part's volume in cubic millimeters? <input type="text"/>



TIP

When you open the data file, modify the part, and then determine the volume. The value displayed is **13033.216**. The value displays to 3 places to the right of the decimal.

In this case, you would enter the answer as:

AutoCAD 2009 Certified Associate Exam Sections and Objectives

The AutoCAD 2009 Certified Associate Examination includes 12 sections and 30 questions. Each section covers specific objectives. The recommended AOTC courseware for this exam is AutoCAD 2009 / AutoCAD LT 2009: Essentials AOTC. You can purchase this guide at <http://store.autodesk.com> or from your local ATC. Schools also can purchase from an Autodesk Academic Value Added Reseller at <http://www.autodesk.com/education> (select “Locate a Reseller”).

Section	Questions	Exam Objectives	AOTC Chapter
Introduction to AutoCAD	1	Describe and set the workspace.	Chapter 1: Taking the AutoCAD Tour
Creating Drawings	4	Create and edit geometry using the Dynamic Input interface. Use running object snaps and object snap overrides to select snap points in the drawing. Use Polar Tracking and PolarSnap efficiently and effectively. Use the Units command to set drawing units.	Chapter 2: Creating Basic Drawings
Manipulating Objects	6	Use several different selection methods to select objects. Use the Move command to move objects using object snaps, coordinate entry, and object snap tracking. Use the Copy command to copy objects in the drawing. Use the Rotate command to rotate objects in the drawing. Use the Mirror command to mirror objects in the drawing. Use the Array command to pattern objects in the drawing.	Chapter 3: Manipulating Objects
Drawing Organization and Inquiry Commands	3	Describe the purpose of Layer o. Describe the use and effect of the ByLayer property. View object properties using the Quick Properties panel.	Chapter 4: Drawing Organization and Inquiry Commands
Altering Objects	2	Use the Offset command to create parallel and offset geometry. Use the Fillet command to create radius geometry connecting two objects.	Chapter 5: Altering Objects
Working with Layouts	1	Modify the viewport scale factor.	Chapter 6: Working with Layouts
Annotating the Drawing	3	Use the Multiline Text command to create and format paragraphs of text. Use the Text command to create single line text. Make single line text associative. Create and use text styles.	Chapter 7: Annotating the Drawing
Dimensioning	2	Create and modify dimension styles to control the appearance of dimensions. Create and edit multileaders.	Chapter 8: Dimensioning
Hatching Objects	2	Create hatch patterns and fills. Use the Hatchedit command to edit hatches and fills.	Chapter 9: Hatching Objects
Working with Reusable Content	3	Use the Block command to create a block definition. Use the Insert command to insert a block reference in a drawing. Use tool palette tools to add geometry to your drawing.	Chapter 10: Working with Reusable Content
Creating Additional Drawing Objects	2	Use the Tablestyle command to create table styles. Create tables and enter values in the table cells.	Chapter 11: Creating Additional Drawing Objects
Plotting	1	Create and modify a page setup.	Chapter 12: Plotting Your Drawings

AutoCAD 2009 Certified Professional Exam Sections and Objectives

The AutoCAD 2009 Certified Professional Examination includes 5 sections and 20 questions. Each section covers specific objectives. You must also pass the AutoCAD 2009 Certified Associate exam to earn the AutoCAD 2009 Certified Professional title. The recommended AOTC courseware for this exam is AutoCAD 2009: Essentials AOTC. You can purchase this guide at <http://store.autodesk.com> or from your local ATC. Schools can also purchase from an Autodesk Academic Value Added Reseller at <http://www.autodesk.com/education> and select “Locate a Reseller”.

Section	Questions	Exam Objectives	AOTC Chapter
Manipulating Objects	5	Use the Move command to move objects using object snaps, coordinate entry, and object snap tracking. Use the Copy command to copy objects in the drawing. Use the Rotate command to rotate objects in the drawing. Use the Mirror command to mirror objects in the drawing. Use the Array command to pattern objects in the drawing.	Chapter 3: Manipulating Objects
Drawing Organization and Inquiry Commands	1	Change object properties.	Chapter 4: Drawing Organization and Inquiry Commands
Altering Objects	2	Use the Offset command to create parallel and offset geometry. Use the Stretch command to stretch objects.	Chapter 5: Altering Objects
Working with Layouts	1	Move, copy, resize, and delete viewports.	Chapter 6: Working with Layouts
Annotating the Drawing	3	Use the Multiline Text command to create and format paragraphs of text. Use the Text command to create single line text. Make single line text associative. Edit text using a variety of commands and methods.	Chapter 7: Annotating the Drawing
Dimensioning	3	Create and modify dimension styles to control the appearance of dimensions. Create and edit multileaders. Edit text using a variety of commands and methods.	Chapter 8: Dimensioning
Hatching Objects	1	Create hatch patterns and fills.	Chapter 9: Hatching Objects
Working with Reusable Content	1	Use the Insert command to insert a block reference in a drawing.	Chapter 10: Working with Reusable Content
Creating Additional Drawing Objects	2	Use the Pedit command to edit the polylines. Create tables and enter values in the table cells.	Chapter 11: Creating Additional Drawing Objects
Plotting	1	Describe how to use the viewport and annotation lists on the status bar to set annotation scales in the drawing.	Chapter 12: Plotting Your Drawings

<http://www.autodesk.com/certification>
email: certification@autodesk.com

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