

***CompTIA A Core 2 Exam Guide to Operating
Systems and Security 10th edition Andrews Solutions
Manual***

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Solutions for Chapter 11: Windows Versions and Customer Service

Lab Manual for A+ Guide to IT Technical Support (Comprehensive, 10th Edition), ISBN xxx-xxxxxxxxxx

[A HD] **Lab 11.1 Create and Manage Multiple Desktops**

[B HD] *Review Questions*

1. Which taskbar icon shows you all existing desktops on your Windows 10 computer?

Answer: Task View

2. Which keyboard shortcut toggles between the active desktop and Task View?

Answer: Win+Tab

3. Which two keyboard shortcuts switch between desktops without using Task View?

Answer: Ctrl+Win+Left and Ctrl+Win+Right

4. Why might you want one window pinned to all desktops?

Answer: Answers may vary.

5. How do you think you might be able to use multiple desktops?

Answer: Answers may vary.

[A HD] Lab 11.2 Use Windows Keyboard Shortcuts

[B HD] *Review Questions*

1. What key is universally used to launch Help?

Answer: F1

2. How many Windows logo keys are usually included on an enhanced keyboard?

Answer: Two

3. What keyboard shortcut combinations can be used to copy and paste a block of text?

Answer: Ctrl+C for copy and Ctrl+V for paste

4. Which key can you press to open the Start menu?

Answer: The Windows logo key

5. What is the result of pressing the **[Insert Windows Icon Here]** Windows logo + P key combination? Describe a situation in which a user might find this menu helpful:

Answer: This combination will display a dialog box with options for Computer only, Duplicate, Extend, and Projector only. This feature can be helpful when using a projector or multiple monitors.

[A HD] Lab 11.3 Use the Problem Steps Recorder

[B HD] *Review Questions*

1. In Steps Recorder, how do you know that an action using the mouse is recorded?

Answer: A red dot appears on the screen.

2. What type of folder contains the file of recorded steps?

Answer: A zipped folder

3. What type of file contains the recorded steps? By default, which program is used to view the file?

Answer: MHTML document; Internet Explorer

4. Does Steps Recorder record a script of the actions taken or images of the actions taken?

Answer: Steps Recorder records both.

5. Imagine you have a job working on a help desk. In what situation might you use Steps Recorder?

Answer: Answers will vary. Example answers: (1) You can use the recorder while performing remote assistance. If the problem is not easily described, a recording from Steps Recorder could be sent so you could review the actions the user is taking. (2) You can use the recorder if you want to be able to remember how you performed an action without having to take notes.

[A HD] Lab 11.4 Record Apps with Game DVR

[B HD] *Review Questions*

1. What app is similar to Game DVR but captures screenshots and generates a report of all actions taken?

Answer: Steps Recorder

2. Which keyboard shortcut opens the Game Bar?

Answer: Win+G

3. Why do you have to tell Windows that an app is a game in order to use Game DVR?

Answer: Game DVR was originally intended to be used for sharing gaming activities.

4. Where are Game DVR screenshots and video captures automatically saved?

Answer: A user's Videos\Captures folder

5. What information is automatically included in a video's file name?

Answer: The app that was recorded and the time and date of the recording

6. Describe the steps for disabling background recording after it's been enabled.

Answer: Open the Windows 10 **Settings** app. Click **Gaming**, then click **Game DVR**. Click to turn off **Record in the background while I'm playing a game**.

[A HD] Lab 11.5 Understand IT Codes of Ethics

[B HD] *Review Questions*

1. Did your group have any trouble agreeing on the seven most important values? Why did you agree or disagree?

Answer: Answers may vary.

2. Do you think having a company code of ethics makes ethical decisions any easier? Why?

Answer: Answers may vary. Although it may not make things easier for personal decisions, a code of ethics can provide clarity and help you defend your actions.

3. Do you think most people share a fundamental set of values? Why?

Answer: Answers may vary. Some values are common to many cultures, but not all.

4. What can you do in cases where your personal values conflict with the values of your employer?

Answer: Answers may vary. Ethical decisions can be difficult. Personal ethics, professional codes of ethics, company policy, and the law all have to be taken into consideration.

[A HD] Lab 11.6 Provide Customer Service

[B HD] *Review Questions*

1. What viewpoints about the preceding scenarios did other members of your group have that you hadn't considered?

Answer: This answer depends on the student's research and experience.

2. Did you have any trouble coming to a consensus about how to deal with each situation?
Explain your answer:

Answer: This answer depends on the student's research and experience.

3. Why is an understanding of good customer service important for a technician who doesn't work directly with customers?

Answer: The same interpersonal skills are necessary when working with colleagues.

4. How can you improve your listening skills when working with customers?

Answer: This answer depends on the student's research and experience.

[A HD] Lab 11.7 Practice Help-Desk Skills

[B HD] *Review Questions*

1. After doing your best, but finding you cannot solve a customer's problem, what is the appropriate next step?

Answer: It would then be time to escalate the problem to the next tier of customer service.

2. Your cell phone rings while you're working with a customer. You look at the incoming number and realize it's your sister calling. How do you handle the call?

Answer: This answer is somewhat dependent on the student's opinion. The cell phone should have been turned off initially. Working with the customer should be the top priority. However, if the call is of an urgent personal nature, you should excuse yourself politely.

3. Why is it not a good idea to tell a customer about the time you were able to solve the computer problem of a very important person?

Answer: Your primary focus should be on the customer you are helping.

4. A customer is angry and tells you he will never buy another product from your company again. How do you respond?

Answer: This answer is somewhat dependent on the student's opinion. It is important to always deal with customers in a professional and nonconfrontational manner.

[A HD] Lab 11.8 Practice Good Communication Skills

[B HD] *Review Questions*

1. When working at a retail store that also fixes computers, what five pieces of information should you request when a customer first brings a computer to your counter?

Answer: Answers will vary but may include:

- Name and contact information
 - Description of the problem
 - When did the problem start?
 - Have there been any recent changes to the system?
 - Is there any valuable data that needs to be backed up?
2. List three things you should not do while at a customer's site:

Answer: Avoid unprofessional behavior, such as:

- Reading confidential documents
- Using equipment without permission
- Making personal phone calls

3. When is it acceptable to ask a customer to refrain from venting about a problem?

Answer: Sometimes, allowing customers some time to vent can help them calm down. If the customer seems increasingly frustrated or you feel that you are being verbally abused, it's okay to ask the customer to refrain.

4. When is it appropriate to answer a cell phone call while working with a customer?

Answer: Answers may vary. Generally speaking, if the call is required to complete the job, it's okay. Otherwise, it should be avoided.

5. When is it appropriate to install pirated software on a computer?

Answer: It is never acceptable to install pirated software.

[A HD] Lab 11.9 Understand How to Create a Help-Desk Procedure

[B HD] *Review Questions*

1. Can all users' computer problems be solved with remote help-desk support? Why or why not?

Answer: No. Some problems, such as replacing faulty hardware, require a technician on site.

2. After you design and write your help-desk procedures to solve problems, what should you do next?

Answer: Verify that the solution works.

3. How should help-desk procedures address complex problems that require administrative intervention?

Answer: If a problem proves too complex to be solved locally, it should be escalated to the network administrator or other technician.

4. How should you write your procedures based on your users' technical experience?

Answer: The procedures should be established based on the average user.

5. Why do you need to consider the network and computer configuration when creating your procedures?

Answer: The details of the network and workstation will alter the procedure that needs to be followed.

6. What has been your experience when calling a help desk? How well did the technician walk you through the process of solving your problem?

Answer: Answers will vary based on student experience.

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[EOC A HD] Thinking Critically

These questions are designed to prepare you for the critical thinking required for the A+ exams and may use content from other chapters and the web.

1. When Kristy recently started a photography business, she downloaded Photoshop to her computer to edit her photos. She notices her computer freezes when she is using Photoshop, so she asks you to help her fix the problem. Your research discovers that Photoshop requires a lot of RAM to run smoothly, and you need to know how much RAM Kristy's computer has to see if that is the problem. Which Windows tools from the following list can you use to know how much RAM is installed on a system? Select all that apply.
 - a. System window
 - b. Power Options applet
 - c. System Information window
 - d. Network and Sharing Center

Answers: a. System window; c. System Information window

2. John is traveling for work and is spending a week at a new branch. He needs to print an email, but he isn't able to add the network printer to his computer. He is using a Windows 10 Pro laptop, is connected to the network, and can access the Internet. What is a likely and easy fix to John's problem?
 - a. The computer is not set to find resources shared on the network; use the Settings app to fix the problem.
 - b. The computer is not set to find resources shared on the network; use the Network and Sharing Center to fix the problem.
 - c. John did not correctly authenticate to the Windows domain; use the Settings app to fix the problem.
 - d. The drivers for the network printer need to be updated. Use Device Manager to fix the problem.

Answer: b. The computer is not set to find resources shared on the network; use the Network and Sharing Center to fix the problem.

3. Mary wants her 32-bit installation of Windows 7 Professional to run faster. She has 4 GB of memory installed on the motherboard. She decides more memory will help. She installs an additional 2 GB of memory for a total of 6 GB, but does not see any performance improvement. What is the problem and what should you tell Mary?
- She should use Control Panel to install the memory in Windows 7. After it is installed, performance should improve. Tell Mary how to open Control Panel.
 - A 32-bit OS cannot use more than 4 GB of memory. Tell Mary she has wasted her money.
 - A 32-bit OS cannot use more than 4 GB of memory. Tell Mary to upgrade her system to the 64-bit version of Windows 7 Professional.
 - A 32-bit OS cannot use more than 4 GB of memory. Explain the problem to Mary and discuss the possible solutions with her.

Answer: d. A 32-bit OS cannot use more than 4 GB of memory. Explain the problem to Mary and discuss the possible solutions with her.

4. Jack needs to email two documents to a friend, but the files are so large his email server bounced them back as undeliverable. What is your advice?
- Tell Jack to open the documents, break each of them into two documents, and then email the four documents separately.
 - Tell Jack to put the two documents in a compressed folder and email the folder.
 - Tell Jack to put each document in a different compressed folder and email each folder separately.
 - Tell Jack to put the documents on a USB drive and snail mail the drive to his friend.

Answer: c. Tell Jack to put each document in a different compressed folder and email each folder separately.

5. Jawana has been working on a paper for her Anatomy class for weeks. One day her little brother was on her computer and accidentally deleted her paper from the Documents folder. How can Jawana recover her deleted paper?

Answer: The paper is likely in the Recycle Bin. She can open the Recycle Bin, find and select her paper, then click **Restore the selected items.**

6. A technician needs to be prepared to launch programs even when utility windows or the Windows desktop cannot load. What is the program name for the System Information utility? What is the program name for the Remote Desktop utility?

Answer: Msinfo32.exe and mstsc.exe

7. Suppose you are a customer who wants to have a computer repaired. List five main characteristics that you would want to see in your computer repair person.

Answers may vary. Here are some possible answers: Have a positive and helpful attitude, own the problem, be dependable, be customer-focused, be credible, maintain integrity and honesty, know the law with respect to your work, act professionally, and perform your work in a professional manner.

8. When you receive a phone call requesting on-site support, what is one thing you should do before you make an appointment?

Answers may vary. Here are some possible answers: Ask questions to identify the problem and ask the caller to check and try some simple things while on the phone with you.

9. You make an appointment to do an on-site repair, but you are detained and find out that you will be late. What is the best thing to do?

Answer: Call the customer and explain the situation. Agree on a new time of arrival.

10. When making an on-site service call, what should you do before making any changes to software or before taking the case cover off a computer?

Answer: Ask the user to describe the problem in detail and ask if all data on the hard drive is backed up. Then ask permission to service the computer.

11. What should you do after finishing your computer repair?

Answer: Verify that everything is working. Then ask the customer to do the same. Fill out the paperwork.

12. What is a good strategy to follow if a conflict arises between you and your customer?

Answer: Stay professional. Allow the customer to vent. Listen carefully. Do what you can to solve the problem. Escalate if necessary.

13. You have exhausted your knowledge of a problem and it still is not solved. Before you escalate it, what else can you do?

Answer: Ask a knowledgeable coworker for help.

14. If you need to make a phone call while on a customer's site and your cell phone is not working, what do you do?

Answer: Ask permission to use the phone.

15. What is one thing you can do to help a caller who needs phone support and is not a competent computer user?

Possible answers: Allow the customer to ask questions. Be patient and take the customer through each step slowly.

16. Describe what you should do when a customer complains to you about a product or service that your company provides.

Answer: Allow the customer to speak and don't become defensive. Take notes and send the information to the right person in your organization. Be an active listener. Show you care.

17. Robert works in a call center and receives a call from Kathy. Kathy says she can no longer access the online reporting application for her weekly reports through her web browser. You ask your boss, and he tells you that the server team changed the application's URL during an upgrade over the weekend. He asks you to make sure all the other technicians are aware of this change. What is the best way to share this information?

- a. Print a flyer with the new URL and post it on the wall in the call center.
- b. Send out a mass email with the new URL to all the technicians.
- c. Update the knowledge base article that contains the application's URL in the call tracking application.
- d. Yell the new URL to all technicians sitting in the call center.

Answer: c. Update the knowledge base article that contains the application's URL in the call tracking application.

[EOC A HD] Hands-On Projects

Answers will vary.

[EOC A HD] Real Problems, Real Solutions

Answers will vary.

Chapter 1

Windows Versions and Customer Service

At a Glance

Instructor's Manual Table of Contents

- Overview
- Objectives
- Teaching Tips
- Quick Quizzes
- Class Discussion Topics
- Additional Projects
- Additional Resources
- Key Terms

Lecture Notes

Overview

Chapter 1 covers the Windows operating systems, and how this OS provides the interface between users and applications and hardware devices. Students will learn to use several Windows tools and utilities that are useful to view and manage storage devices, examine a system, and troubleshoot simple problems with hardware and applications. Finally, students will explore proper procedure and behavior when working with customers and coworkers.

Objectives

After completing this chapter, students will be able to:

- Use Windows to interface with users, files and folders, applications, and hardware
- Use Windows tools to explore, examine, and support the system
- Explain the various ways Windows secures resources on the network and secures a network connection
- Support customers with professionalism and respect, in addition to your technical skills

Teaching Tips

Windows Interfaces

1. Define how an operating system functions, noting that it facilitates communications between users and applications and users and hardware.
2. List some of the functions of an operating system:
 - a. Provide a user interface
 - b. Manage files
 - c. Manage hardware
 - d. Manage applications
3. Explain that IT support technicians should be a power user of Windows 10 and familiar with Windows 8/7. Point out that Windows 10 has been released but the book was written before it was released.
4. Discuss how Windows OS offers a graphical user interface (GUI) that uses graphics instead of a command-driven interface. Mention that Windows 10 has two graphical interfaces: the desktop and Tablet mode via a feature called Continuum.

Teaching Tip

For a comparison of Windows 10 Home vs Pro, direct users to:
<https://www.microsoft.com/en-us/windows/compare-windows-10-home-vs-pro>

Teaching Tip	Refer to the following Web site to learn more about the history of Windows operating systems: https://www.businessapac.com/history-of-windows-from-ms-dos-windows-1-0-to-windows-10/
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Windows 10 Interface

1. Discuss the characteristics of the Windows 10 desktop, using Figure 1-2 in your discussion.
2. Point out that the taskbar is normally located at the bottom of the Windows desktop. Discuss items that can be found in the taskbar.
3. Review the live tiles that can be found on the right side of the Windows 10 Start menu.
4. Mention that the notification area is also called system tray or systray. Discuss what can be found in this area of the desktop.
5. While in the desktop interface, demonstrate how to launch a program from the desktop using one of the following methods:
 - a. Start menu
 - b. Windows 10 search box with Cortana
 - c. Quick Launch menu
 - d. Pin to taskbar
 - e. Double-click the program file in File Explorer
 - f. Shortcut on the desktop
 - g. Run box or search box
6. Review the tips for managing windows on the desktop.
7. Discuss the following Windows 10 features that apply mainly to the end user:
 - a. Action Center
 - b. Snap Assist
 - c. Task View

Teaching Tip	Refer to the following Web site for information on Windows 10 1903: https://pureinfotech.com/windows-10-1903-19h1-april-2019-update-features/
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Choosing a Windows Edition

1. Introduce students to the available editions of each current version of Windows.
2. Point out that when deciding among the current version, students should select Windows 10 if possible because Microsoft support for its latest OS will last longer.
3. Review the following features that a user or organization might require:
 - a. Domain access
 - b. BitLocker
 - c. Encryption File System (EFS)
 - d. BranchCache
 - e. Media Center

Windows Tools for Users and Technicians

Windows 10/8 File Explorer and Windows 7 Windows Explorer

1. Explore the use of the Windows 10/8 File Explorer and Windows 7 Windows Explorer. Show how Explorer can be used to find folders and files on a computer.
2. Explain a root directory as the very base of a file system, under which all other directories are subdirectories.
3. Emphasize how the root directory changes for different volumes. In other words, the root directory for the C: volume is different from the root directory of the D: volume because each volume has its own root directory.
4. Provide a more detailed explanation for what a subdirectory / child directory / folder is, and then show how to find a subdirectory when given a path.
5. Explain how a filename is used to identify a file, while a file extension is used to identify the type of file involved. Give an example of a path to a file with a visible file extension.
6. Define how the navigation pane can be used in File Explorer to quickly navigate multiple levels of folders.
7. Show how to change the appearance of folders and files within File Explorer.
8. When using the Details view for a folder, show how to add additional columns to the window for additional information.
9. Demonstrate how the Search box can be used for locating files.

10. Use the various additional features with File Explorer to emphasize how students can use the tool to find and navigate the Windows file system.
11. Show how to perform the following operations using Windows 10 File Explorer and Windows 7 Windows Explorer:
 - a. Create a folder
 - b. Create a file
 - c. Copy a file or folder
 - d. Drag and drop file / folder to new location
 - e. Rename a file or folder
 - f. Delete a file or folder
 - g. Select multiple items either with Shift or Ctrl
12. Note that files are sent to the Recycle bin when deleted, although files within the bin are not really deleted.
13. Demonstrate how to create a shortcut on the Windows desktop.

**Teaching
Tip**

Refer to the following Web site to learn more about file organization:
<https://www.groovypost.com/howto/windows-10-files-folders-file-explorer/>

Quick Quiz 1

1. What term is used to describe software that controls a computer?
Answer: operating system (OS)
2. Which of the following has live tiles on the right side that offer continuous real-time updates?
 - A. taskbar
 - B. search box
 - C. Start menu
 - D. System trayAnswer: C
3. What is the name of Windows 10's digital assistant?
Answer: Cortana

4. The top of a top-down hierarchical structure of subdirectories is called which of the following?
 - A. Base directory
 - B. Root directory
 - C. Top directory
 - D. Volume directoryAnswer: B
5. True or False: Even though a computer running Windows might have multiple volumes, the computer only has one root directory for all volumes combined.
Answer: False

The Control Panel

1. Introduce the Windows Control Panel as a window containing several small utility programs called applets. Mention that these applets are used to manage hardware, software, users, and the system.
2. Explain that there are different views available in Control: Category view and Classic view.
3. Demonstrate the following Control Panel applets:
 - Sound applet
 - Network and Sharing Center
 - Power Options
 - Windows 10 File Explorer Options or Windows 8/7 Folder Options applet

Windows 10 File Explorer Options or Windows 8/7 Folder Options

1. Explore the Windows 10 File Explorer Options applet or the Windows 8/7 Folder Options applet in Control Panel. Demonstrate how to change Folder Options so that file extensions are visible.

Power Options

1. Explain that the Power Options applet can be used to help conserve power and increase the time before a battery pack on a laptop needs recharging.
2. Discuss the various power-saving states:
 - Sleep mode (suspend mode)
 - Hibernation

System Window

1. Demonstrate how to find the System window, and point out what useful information can be found there, such as memory installed, type of OS, and Windows edition.
2. Describe the difference between a 32-bit operating system and a 64-bit operating system.
3. Explain how to activate Windows using the Activate Windows option within the System Window.

Teaching Tip

Refer to the following Web site to learn more about 64-bit vs. 32-bit Microsoft OSs: <http://windows.microsoft.com/en-us/windows/32-bit-and-64-bit-windows#1TC=windows-7>

System Information Window

1. The System information (msinfo32.exe) window should be explored. Students should be aware of what information can be found in this application.
2. Describe how a device driver is a piece of software that is used by an operating system to communicate with specific hardware.

Windows 10 Settings App

1. Discuss the three ways students can open the Windows 10 Settings app. Demonstrate one of the three options.
2. Review the Windows 10 Settings window and discuss the following settings that can be reached via the Setting window:
 - a. System
 - b. Devices
 - c. Network & Internet
 - d. Personalization
 - e. Apps
 - f. Accounts
 - g. Time & language
 - h. Gaming
 - i. Ease of Access
 - j. Privacy
 - k. Update & security

How Windows Controls Access to Network Resources

1. Explain that Windows offers three ways to share resources on a network: workgroups, homegroups, and domains.

Windows Workgroup and Homegroup

1. Introduce students to the term peer-to-peer (P2P) network, which is a network that doesn't have centralized control.
2. Discuss the differences between Workgroups and Homegroups. Point out that a homegroup provides less security than a workgroup. Also mention that Windows 10 does not support homegroups.

Windows Domain

1. Explain to students that a Windows domain is a type of client-server network, where resources are managed by centralized computers.
2. Introduce students to Windows Server Active Directory, which is a directory database that hold information about every user and device in a domain.
3. Point out that Windows 10 professional and business editions offers Azure Active Directory (Azure AD), which manages users in the cloud and creates a virtual network of users connected through the Internet.
4. Discuss the three ways Windows 10 offers to authenticate a user so the computer can join a domain. Demonstrate how to join a domain using each of the three methods:
 - a. Domain join
 - b. Azure AD join
 - c. Bring your own device (BYOD) experience

Domain Setup

1. Discuss the steps required to change the way Windows connects to the network in order to join a domain.

Public and Private Networks

1. Explain to students that Windows 10/8 offers three ways to secure a network connection:
 - a. Public network
 - b. Private network
 - c. Domain network
2. Discuss the four network security options that Windows 7 offers:
 - a. Public network
 - b. Home network
 - c. Work network
 - d. Domain network

What Customers Want: Beyond Technical Know-How

1. Emphasize the importance of proper communications with customers. Students should be aware of basic etiquette, as well as the importance of communicating concepts in a clear and precise manner.

Becoming a Competent and Helpful Support Technician

1. Discuss the traits that distinguish a competent and helpful technician from a technician who is incompetent or unhelpful in the eyes of the customer:
 - Be dependable and reliable
 - Keep a positive and helpful attitude
 - Listen without interrupting your customer
 - Use proper and polite language
 - Show sensitivity to cultural differences
 - Express patience and honor to those with physical disabilities
 - Take ownership of the problem
 - Portray credibility
 - Work with integrity and honesty
 - Know the law with respect to your work
 - Look and behave professionally

Planning for Good Service

1. Point out that the key to success is always the same: don't allow circumstances or personalities to affect your commitment to excellence and treat the customer as you would want to be treated.
2. Discuss the use of call tracking software to ensure customer issues are resolved in a timely manner.

3. Explain that good on-site initial contact is dependent on giving a customer the impression of professional demeanor, as well as possessing the proper tools to finish a job.
4. Give information on how to handle an initial phone call with a client, and note what steps or procedures might be followed in a professional phone call.
5. Discuss what information should be gathered from a customer when troubleshooting an issue.
6. The importance of getting a user to reproduce the problem they've experienced should be stressed, as the problem may be caused by a misunderstanding.
7. Provide information on how to set expectations for a customer, and then give students examples of how to deliver on those expectations.
8. Educate students on how to behave when working with a customer on site. Place emphasis on confidentiality of any information encountered. Encourage students to respect the personal work space of the customer.
9. Discuss the importance of providing educational help in addition to fixing a customer's problem.
10. Elaborate on how to perform proper troubleshooting and provide assistance over the phone, and note the importance of giving priority to the customer.

**Teaching
Tip**

When working with a customer over the phone, emphasize to students the importance of giving customers a callback number or way to contact you in the event the call is dropped or a problem reoccurs.

11. Emphasize the use of proper instructions for helping users that will most likely not understand technical terms.
12. Note that if a customer is unable to locate or follow the instruction given, the students should ask the customer to read what is on the screen to get an idea of where the customer is.
13. Give guidance on how to handle a customer that may be more technically experienced and quick to make incorrect assumptions.
14. Prepare students to handle customer complaints or upset customers, and discuss ways of responding to these situations.

15. Explain how to determine whether a problem has been fixed, and give steps to perform prior to ending the call.
16. A vital step toward prevention is to educate a user as to why a problem might have occurred, and give proper steps to avoid the problem in the future.
17. Describe a company's typical escalation process, and how escalation might work from the point of view of the students. Give details regarding how this might work with a call tracking or ticketing system.
18. Teach students how to handle an escalation, and that they should explain the escalation process to customers.
19. Discuss how to work well with others, and give tips on how students can improve coworker relations, such as with proper conflict handling.
20. Explain how students should handle a situation in which they may not have the solution to a customer's problem.

Quick Quiz 2

1. Which of the following is a tool for viewing basic network information and setting up connections?
 - A. Print Management
 - B. Programs and Features
 - C. Network and Sharing Center
 - D. Internet Options

Answer: C

2. True or False: Windows uses the file extension to know which application to open to manage the file, which is called the file association.

Answer: True

3. A 64-bit OS performs better than a 32-bit OS, but what does it require more of?

Answer: memory

4. When dealing with an irate customer, you should:

- A. Defend yourself
- B. Blame others
- C. Listen and acknowledge the problem
- D. Offer to call the customer at a later time

Answer: C

5. When should you escalate a problem?
 - A. When the problem is resolved
 - B. Before getting customer contact information
 - C. During the initial contact with a customer
 - D. When you lack access to more extensive resources

Answer: D

Class Discussion Topics

1. Have a class discussion on different ways students could handle upset customers. Some of the students may have already had experience in this area. Could outlining the steps you'll take to resolve the customer's problem help the issue?
2. Ask students if anyone has ever had to handle a customer who was overly confident. Discuss ways to handle someone who might want to give advice or withhold information that they think you do not need to know.

Additional Projects

1. Research the latest version of Microsoft Windows 10. Look for new features, system requirements, versions, and costs. Report your results in one to two paragraphs.
2. Compare the Windows 10 operating system to the previous version of Windows: Windows 8/7 OS. What are the benefits to upgrading to Windows 10?

Additional Resources

1. Microsoft's home page for Windows
<http://www.microsoft.com/windows/>
2. Overview of Operating System Functions
<http://computer.howstuffworks.com/operating-system.htm>
3. Configure Windows 10
<https://docs.microsoft.com/en-us/windows/configuration/>
4. Microsoft: Managing Users
<https://docs.microsoft.com/en-us/windows/desktop/ad/managing-users>
5. Customer Service Etiquette
<https://www.providesupport.com/blog/customer-service-etiquette-tips-infographic/>

Key Terms

For explanations of key terms, see the Glossary for this text.

- 32-bit operating system
- 64-bit operating system
- Action Center
- Active Directory (AD)
- Aero user interface
- Azure Active Directory (Azure AD)
- BranchCache
- BYOD experience
- call tracking software
- Category view
- charm
- charms bar
- child directories
- Classic view
- client/server
- compressed (zipped) folder
- Control Panel
- Cortana
- device drivers
- domain
- domain user account
- escalate
- File Explorer
- File Explorer Options applet
- file extension
- file name
- Folder Options applet
- folders
- gadgets
- graphical user interface (GUI)
- hibernation
- homegroup
- library
- live tiles
- logical topology
- Media Center
- Metro UI
- Metro User Interface
- modern interface
- navigation pane
- Network and Sharing Center
- Notepad

- notification area
- operating system (OS)
- path
- peer-to-peer (P2P)
- physical topology
- pinning
- Power Options applet
- Recycle Bin
- root directory
- service
- Settings app
- sleep mode
- sleep timers
- Sound applet
- standby mode
- Start screen
- subdirectories
- suspend mode
- System Information
- system tray
- System window
- systray
- taskbar
- Task View
- ticket
- volume
- Windows 8.1
- Windows 10
- Windows Explorer
- workgroup