CompTia A+ Chapter

Review Questions

# Chapter 1

1. A computer is making a lot of noise. Of the following choices, what is the likely problem?
   1. Faulty motherboard
   2. USB flash drive
   3. Power supply set to wrong voltage
   4. Case fan
2. Another technician ordered a fan for a computer case. It has arrived, and you need to install it. The original fan has been removed. Where should you connect the fan power connection?
   1. AC outlet
   2. P1 power supply connector
   3. Front panel power
   4. Motherboard
3. A power supply failed after a technician added some hard drives to a desktop computer. You need to purchase an additional power supply. What is a likely power rating you’ll purchase to ensure that the power supply doesn’t fail again?
   1. 600 W
   2. 600 V
   3. 300 W
   4. 250 V
4. Which of the following voltages are not provided by ATX-based power supplies?

(Choose two.)

* 1. 12 VDC
  2. -12 VDC
  3. 115 VAC
  4. 15 VDC

1. Molex connectors provide power to disk drives from ATX-rated power supplies. What voltages are supplied through the Molex connector?
   1. 3.3 V and 5 V
   2. 5 V and 12 V
   3. 5 V and 15 V
   4. 12 V and 15 V
2. A system is no longer booting to the SATA hard drive, and you suspect that the ATX-based power supply might not be providing the correct voltages. What voltages should you see on the SATA power connector?
   1. 3.3 VDC, 5 VDC, and 12 VDC
   2. 3.3 VDC, 12 VDC, and 15 VDC
   3. 5 VDC, 12 VDC, and 15 VDC
   4. 12 VDC, 15 VDC, and 24 VDC
3. Which of the following can you use to protect against power sags?
   1. Commercial power
   2. Power supply
   3. UPS
   4. MSDS
4. Which of the following can protect against ESD damage? (Choose all that apply.)
   1. ESD wrist strap
   2. Reducing humidity as much as possible
   3. Ensuring that computers are stored on carpets whenever possible
   4. ESD mat
5. You want to verify that a power supply is providing proper voltages while it’s connected to the P1 connector on the motherboard. What would you use?
   1. Surge suppressor
   2. Multimeter
   3. Power strip
   4. Power supply tester
6. You open a computer to troubleshoot it and notice an excessive amount of dust inside it. Of the following choices, what is the best choice to clean it?
   1. Lint-free cloth
   2. Vacuum cleaner
   3. Glass cleaner
   4. Compressed air
7. Which of the following can contribute to ESD damage?
   1. Case fans
   2. Carpet
   3. Touching the computer case while working on a computer
   4. ESD mats
8. After cleaning a computer screen with a cleaning compound, your fingers start to develop a rash. What can you use to quickly identify what was in the cleaning compound?
   1. MSDS
   2. Internet
   3. Local hospital
   4. Coworkers

# Chapter 2

1. Which of the following choices lists common motherboard form factors from the smallest to the largest?
2. Pico-ITX, mini-ITX, micro-ATX, ATX
3. Pico-ITX, micro-ATX, mini-ITX, ATX
4. ATX, pico-ITX, mini-ITX, micro-ATX
5. Mini-ITX, micro-ATX, pico-ITX, ATX
6. Of the following choices, what two components determine the speed of a bus?
7. Bit size and multiplier
8. Crystal frequency and bit size
9. Crystal frequency and multiplier
10. CPU capability and cache size
11. You have PCIe x2 card that you want to install into a computer. Of the following choices, here could you install it?
12. PCIe x1 expansion slot
13. B. PCIe X4 expansion slot
14. C. PCI expansion slot
15. D. PCI-X expansion slot
16. You are trying to start a system from a bootable DVD, but the system always boots to the hard drive instead. What should you do?
    1. Replace the DVD.
    2. Replace the DVD drive.
    3. Manipulate the start sequence in the BIOS.
    4. Flash the BIOS.
17. When starting a computer, you see a message indicating a CMOS error. What is the most likely solution?
    1. Flash the CMOS.
    2. Flash the BIOS.
    3. Replace the battery.
    4. Replace the CMOS.
18. After trying to run virtualization software, you realize that the BIOS doesn’t support virtualization. What should you do?
    1. Upgrade the CPU.
    2. Upgrade the motherboard.
    3. Replace the CMOS battery.
    4. Flash the BIOS.

# Chapter 3

1. You are replacing two DDR3 DIMMs in an Intel dual-channel motherboard. Into which slots should you put them?
   1. Two different-colored slots
   2. Two identical-colored slots
   3. Separate banks
   4. Slots 1 and 4
2. You are shopping for replacement DDR3 RAM. Your system has a 400-MHz clock. What should you buy?
   1. PC3-400
   2. DDR3-400
   3. PC3-25600
   4. PC3-12800
3. An Intel CPU has two cores, but the operating system shows it has four CPUs. What feature allows this to happen?
   1. Hyper-threading
   2. HyperTransport
   3. Dual-channel RAM
   4. L2 cache
4. 4. Of the following choices, which is fastest?
   1. L1 cache
   2. L2 cache
   3. L3 cache
   4. Triple-channel DDR3
5. 5. Which of the following replaces the Intel Socket H?
   1. LGA 775
   2. LGA 1366
   3. LGA 1156
   4. LGA 1155
6. You are asked to troubleshoot a computer that is randomly rebooting or failing. Of the following choices, what hardware can cause these symptoms? (Choose all that apply.)
   1. RAM
   2. Fan
   3. Power supply
   4. Virus

# Chapter 4

1. You are adding an internal SATA drive to an existing system. How many drives can you connect to a SATA connector?
   1. One
   2. Two
   3. Three
   4. Four
2. What type of data connector is used for a SATA 3G drive?
   1. 40-pin, 40-wire ribbon cable
   2. 40-pin, 80-wire ribbon cable
   3. 7 pins with an L-shaped connector
   4. 15 pins with an L-shaped connector
3. Which of the following is not a valid external connector for a hard drive?
   1. USB
   2. FireWire
   3. eSATA
   4. 1934b
4. How much data can you store on a DL DVD disc?
   1. 700 MB
   2. 4.7 GB
   3. 8.5 GB
   4. 17.1 GB
5. What is the minimum number of drives in a RAID-1?
   1. One
   2. Two
   3. Three
   4. Four
6. You hear a hard drive making loud clicking noises. What does this indicate?
   1. Failing hard drive
   2. Normal operation
   3. Disk thrashing
   4. Bad clusters

# Chapter 5

1. How many USB devices can a USB controller support?
   1. 2
   2. 4
   3. 63
   4. 127
2. You want to plug in a USB 3.0 device. What port should you use?
3. A blue rectangular port
4. A rectangular port with a curved top C. A pink TRS connector
5. A green PS/2 connector
6. What is the maximum length of a FireWire 400 cable?
   1. 3 meters
   2. 5 meters
   3. 4.5 meters
   4. 100 meters
7. You want to control two computers with a single keyboard, mouse, and monitor. What should you use?
   1. PCIe expansion card
   2. KVM switch
   3. MIDI device
   4. 7.1 system
8. You need to identify a device that can create files from printed documents. Of the following choices, what would you select?
   1. Multifunction printer
   2. Biometric device
   3. Barcode reader
   4. MIDI-enabled device
9. You want to watch and record TV shows on a desktop computer. What is needed?
   1. KVM switch
   2. Webcam
   3. TV tuner card
   4. Camcorder

# Chapter 6

1. Of the following display interfaces, what uses an analogue signal? (Choose all that apply.)
   1. HDMI
   2. DVI-D C. DVI-A
   3. VGA
2. Which of the following display interfaces include both audio and video signals?
   1. HDMI
   2. DVI-D
   3. DVI-A
   4. VGA
3. You have a computer with a DVI port and an HDMI port. One monitor is connected to the DVI port, and you want to add a second monitor. The second monitor has a single VGA port. How can you accomplish this?
   1. Plug the VGA cable into the HDMI port.
   2. Use a passive VGA-to-HDMI adapter.
   3. Plug the VGA cable into the DVI port, and plug the DVI cable into the HDMI port.
   4. None of the above.
4. Your company is replacing all the CRT monitors with flat panel displays. What should be done with the old monitors?
   1. Take them directly to a landfill.
   2. Throw them in the dumpster.
   3. Take them to an incinerator.
   4. Dispose of them as hazardous waste in compliance with local regulations.
5. You have recently installed a new video card with a DVI interface. The display always defaults to VGA mode and can’t be changed. What is the most likely problem?
   1. Nothing; this is normal for DVI.
   2. Incorrect driver.
   3. Faulty monitor.
   4. Faulty video card.
6. You are troubleshooting a problem with a blank LCD display. You have verified that it is connected to the computer and has power. What’s the most likely problem?
   1. Incorrect driver
   2. Faulty CRT tube
   3. Failed backlight
   4. Dead pixels

# Chapter 7

1. What is a duplexing assembly used for in a printer?
   1. To print on both sides of the paper
   2. To improve RAID-1
   3. To allow two-way communication
   4. To double the speed of the printer
2. A customer wants to buy a printer for home use that can print color. She asks you for your advice. What would you recommend?
   1. Dot matrix printer
   2. Color laser printer
   3. Inkjet printer
   4. Laser printer
3. You are preparing to replace a toner cartridge on a laser printer. Which of the following steps should you take first?
   1. Restart the print spooler.
   2. Turn off the printer.
   3. Remove the new toner from the package.
   4. Print a test page.
4. Of the following choices, what is not used to connect a wired printer?
   1. USB
   2. Parallel
   3. 802.11
   4. Ethernet
5. What should you do if an inkjet printer is printing random streaks?
   1. Replace the toner cartridge.
   2. Clean the fusing assembly.
   3. Update the drivers.
   4. Clean the print heads.
6. You are troubleshooting a problem with an HP6L laser printer. One LED is steady red, and another is blinking orange. The customer complains that it prints streaks in the same place on every page. What is the most likely problem?
   1. The imaging drum
   2. The fuser
   3. An incorrect print driver
   4. Impossible to tell without the manual

# Chapter 8

1. Which key can often be used with a function key to disable wireless on a laptop computer?
2. F1 key
3. Num Lock key
4. Fn key
5. Caps Lock key
6. Which of the following best describes a docking station?
7. A device designed to enhance the capabilities of a laptop and allow it to function as a desktop computer
8. A device that has one connection and provides additional ports for the laptop
9. A component that provides AC power to an LED display
10. A component used for laptop physical security
11. A laptop display is dark, but you can see information on the screen when you shine a flashlight into it. Of the following choices, what is the problem? (Choose two.)
12. Backlight
13. Inverter
14. LCD display
15. Video card
16. You are preparing to replace the keyboard in a laptop computer. Of the following choices, what should you include in the process? (Choose all that apply.)
17. Toggle the Fn key before starting.
18. Obtain the manufacturer’s documentation for the laptop.
19. Remove the LCD display first.
20. Remove all power including the battery.
21. A user wants to conserve power on his system when he’s not using it. Which of the following saves the most power?
    1. Turning off the display after inactivity
    2. Turning off disks after inactivity
    3. Sleep
    4. Hibernate
22. Wireless has failed on a laptop computer. Which of the following options would restore the capability? (Choose two.)
    1. Install a Mini-PCIe card.
    2. Install a USB wireless adapter.
    3. Install a PCI wireless card.
    4. Install an AGP wireless adapter.

# Chapter 9

1. Of the following choices, what would cause a device to change from portrait mode to landscape mode when the device is moved?
   1. Touch flow
   2. Accelerometer
   3. Gyro
   4. Geotracking
2. Of the following choices, what represents a benefit to users of purchasing apps only through Apple’s App Store?
   1. Cheaper than purchasing at a store
   2. Automatically includes source code
   3. Upgrades are automatic
   4. Less chance of downloading malicious software
3. What is required before using two Bluetooth devices together?
   1. Subscribe to a cellular plan
   2. Connect to a Wi-Fi network
   3. Enable POP3
   4. Pair them
4. You are helping a user configure email on a tablet. It is prompting you for the port used for secure POP3. What is the most likely port number you should enter?
   1. 25
   2. 110
   3. 993
   4. 995
5. A business owner wants to ensure that her tablet is as secure as possible. Of the following choices, what should she enable? (Choose all that apply.)
   1. Remote wipe
   2. GPS location services
   3. Passcode lock
   4. Bluetooth pairing
6. What should you do before updating the operating system of a mobile device?
   1. Flash the BIOS
   2. Back up the device
   3. Enable remote wipe
   4. Disable Wi-Fi and cellular connections

# Chapter 10

1. You are working with a customer to resolve a problem with his laptop, and your personal

cell phone rings. What should you do?

* 1. Ignore it.
  2. Switch the cell phone to vibrate.
  3. Excuse yourself and answer the phone.
  4. Explain that it is an emergency and that you have to answer the phone.

1. You are a technician helping an executive resolve a problem with her computer. While helping her, you see some confidential company papers on her printer. Of the following choices, what is acceptable?
   1. Look at the papers only if she leaves.
   2. Throw them away.
   3. Ignore them.
   4. Tell her she shouldn’t print them.
2. A network printer with multiple paper trays was no longer printing due to a network problem. A technician reconfigured the printer and verified that it was connected. Later, customers complained that the printer could print to one tray but not the other. What troubleshooting step did the technician miss?
   1. Identify the problem.
   2. Verify full system functionality.
   3. Establish a plan of action to resolve the problem.
   4. Documentation.
3. Sally wants to purchase a computer that she’ll use as a basic computer at home. She plans on doing research on the Internet, accessing email, and writing some documents. Which of the following choices best meets her needs?
   1. Thick client.
   2. Thin client.
   3. HTPC.
   4. Virtualization workstation.
4. Of the following types of workstations, which would most likely use a high-end liquid cooling system?
   1. Thick client.
   2. Gaming PC.
   3. Home server.
   4. Home theatre PC.
5. A user is planning to add a home server PC that will be used by five users in his home for data sharing. He asks you what type of disk storage would be best. What would you recommend?
   1. Solid state disk.
   2. Blu-ray.
   3. RAID array.
   4. HDMI-compatible.

# Chapter 11

1. Which of the following Windows 7 editions include both 32-bit and 64-bit versions? (Choose all that apply.)
   1. Starter
   2. Home Premium
   3. Professional
   4. Ultimate
2. A user is running a 32-bit version of Windows 7 Home Premium with 6 GB of RAM installed. However, the system is recognizing only 3.2 GB of RAM. What is the problem?
   1. Home Premium does not support more than 3.2 GB of RAM.
   2. A 32-bit Windows operating system can recognize only about 3.2 GB of RAM.
   3. The processor is not configured in x64 mode.
   4. The processor is an x86 processor.
3. A user is shopping for a computer and sees some computers labelled as x86 and some as x64. What does x86 mean?
   1. The processor supports 32 bits for addressing RAM.
   2. The processor supports 64 bits for addressing RAM.
   3. The processor supports 86 bits for addressing RAM.
   4. The processor includes eight cores but defaults to two 6 cores.
4. What’s the minimum amount of RAM required for Windows 7 on a 32-bit system?
   1. 512 MB
   2. 1 MB
   3. 1 GB
   4. 2 GB
5. What’s the maximum number of processors that a Windows 7 Home Premium system can recognize?
   1. 1
   2. 2
   3. 32
   4. 256
6. Which of the following editions of Windows 7 support Windows XP Mode? (Choose all that apply.)
   1. Starter
   2. Home Premium
   3. Professional
   4. Ultimate
7. A user is trying to enable BitLocker on a 32-bit edition of Windows 7 Professional with 2 GB of RAM but is having problems. What is the likely reason?
   1. BitLocker is not supported on 32-bit editions of Windows 7.
   2. BitLocker has not been enabled in the Control Panel.
   3. BitLocker is not supported on systems with less than 3 GB of RAM.
   4. BitLocker is not supported on Windows 7 Professional.
8. A user was able to run a program in Windows XP but cannot get it to run in Windows 7 Home Premium. What’s the best solution?
   1. Enable Windows XP Mode
   2. Use the Program Compatibility wizard
   3. Enable UAC
   4. Reinstall Windows XP
9. A user was able to run a program in Windows XP but cannot get it to run in a 64-bit edition of Windows 7 Professional. What’s a possible solution?
   1. Use Windows XP Mode
   2. Upgrade to Windows 7 Ultimate and use Windows XP Mode
   3. Enable BitLocker
   4. Reinstall Windows 7 using a 32-bit edition
10. Which of the following Windows 7 editions support backing up to a network location? (Choose all that apply.)
    1. Starter
    2. Home Premium
    3. Professional
    4. Ultimate
11. Where are 32-bit application files stored in a Windows 7 64-bit system?
    1. C:\Windows
    2. C:\Program Files
    3. C:\Program Files (x32)
    4. C:\Program Files (x86)

# Chapter 12

1. A user wants to create a dual-boot system running Windows XP and Windows 7. What is important to remember? (Choose two.)
   1. Install Windows XP first.
   2. Install Windows 7 first.
   3. Install both operating systems on different partitions.
   4. Install both operating systems on the same partition.
2. What is the difference between a clean installation and an upgrade?
   1. A clean install includes applications and settings from previous installations.
   2. An upgrade includes applications and settings from previous installations.
   3. A clean installation starts by formatting the hard drive.
   4. There is no difference; they are the same.
3. A user is running Windows XP and wants to upgrade to Windows 7. Is this possible?
   1. Yes; the user can do an upgrade directly to Windows 7.
   2. Yes, as long as the file system is formatted with NTFS.
   3. Yes, as long as both versions are 32-bit versions.
   4. No; XP cannot be directly upgraded to Windows 7.
4. A user has completed a clean installation on a single-partition system running Windows XP. The user wants to access data files that were stored in the user’s My Documents folder. Is this possible?
   1. No; existing files are deleted during a clean installation.
   2. Yes; these file locations were not modified at all.
   3. Yes; these files are in the Windows.old folder.
   4. Yes; the user can reinstall Windows XP to access the older data files.

# Chapter 13

1. What would you use to end a program that is not responding?
   1. Application tab of Task Manager.
   2. Performance tab of Task Manager.
   3. Users tab of Task Manager.
   4. Services tab of Task Manager.
2. What can you use to identify what is consuming most of the CPU’s processing power?
   1. The Services applet.
   2. The System applet.
   3. The Performance tab of the Task Manager.
   4. The Processes tab of the Task Manager.
3. A printer is no longer printing print jobs, and you suspect a problem with the print spooler. How can you restart it?
   1. Use the Applications tab of Task Manager.
   2. Use the Task Scheduler.
   3. Use the Services applet.
   4. Use the Programs tab of Internet Options.
4. You’re working on a Windows 7–based system, and you need to access a folder in Windows Explorer. You can’t find the folder, and you suspect it’s hidden. What should you do?
   1. Use the Default Programs applet to modify the view.
   2. Change the View to Large Icons.
   3. Use Folder Options to show hidden files and folders.
   4. Use Folder Options to show extensions.
5. A user regularly accesses websites by using Internet Explorer. The user entered passwords in website forms and wants to remove them from the computer. How can this be accomplished?
   1. Use the Programs tab of Internet Options.
   2. Use the Content tab of Internet Options.
   3. Use the Security tab of Internet Options.
   4. Use the Privacy tab of Internet Options.
6. Which of the following tools is in the Administrative Tools group on Windows 7? (Choose all that apply.)
   1. Action Centre.
   2. Computer Management.
   3. Event Viewer.
   4. HomeGroup.

# Chapter 14

1. You entered the chkdsk command at the command prompt but received a syntax error. What command can you enter to show you the proper format of the command? (Choose all that apply.)
   1. chkdsk /syntax
   2. chkdsk /?
   3. help chkdsk
   4. chkdsk /show
2. You need to copy over a system file in Windows XP. What command can you use to change the system attribute?
   1. msinfo32
   2. msconfig
   3. regedit
   4. attrib
3. Which of the following commands will change a file named Study.doc to a read-only file?
   1. attrib +r study.doc
   2. attrib +ro study.doc
   3. attrib +h study.doc
   4. attrib +s study.doc
4. What command can you use to delete a folder from the command prompt?
   1. md
   2. cd
   3. rd
   4. df
5. What can you do with the copy command that you can’t do with the xcopy command?
   1. Nothing. The xcopy command can do everything that the copy command can do.
   2. You can copy entire subdirectories.
   3. You can suppress prompts.
   4. You can use wildcards.
6. A Windows 7 system was recently infected with a virus. After removing the virus, you want to verify the integrity of system files and repair any problems. What command would you use?
   1. sfc /purgecache
   2. sfc /scannow
   3. sfc /verifyonly
   4. msconfig
7. You suspect that the kernel32.dll file is corrupt. Which command can you use to verify the integrity of the file?
   1. chkdsk /verifyfile=c:\windows\system32\kernel32.dll
   2. sfc /verifyfile=c:\windows\system32\kernel32.dll
   3. attrib /verifyfile=c:\windows\system32\kernel32.dll
   4. cd /verifyfile=c:\windows\system32\kernel32.dll

# Chapter 15

1. You restarted a system and noticed an error message flash on the screen. You want to identify what applications are configured to start automatically. What can you use?
   1. Shadow copy
   2. Device Manager
   3. Services
   4. Msconfig
2. You are trying to optimize the performance of a computer with two internal hard drives and an external USB drive. Windows is on C, and D is used for data storage. You want to move the paging file. What is the best option?
   1. Move it to the external USB drive.
   2. Move it to the C drive.
   3. Move it to the D drive.
   4. Move it to the boot partition.
3. You are troubleshooting a system and decide to use a restore point from three days ago. You explain to the user that it will revert the system to the state it was in three days ago. The user is concerned that his data will be lost. How would you respond?
   1. Restore points will erase the data, so it should be backed up.
   2. Restore points won’t modify user data.
   3. If the data is on the C drive, there is no problem.
   4. If the data is on the D drive, there is no problem.
4. You recently added a graphics card but realize that all the features are not working. What should you do?
   1. Enable System Protection.
   2. Update the driver.
   3. Configure Program Compatibility.
   4. Use Device Manager to disable the device.
5. Your company recently received some computers that include built-in modems, but users shouldn’t use them. How can you prevent users from using these modems?
   1. Remove the modems.
   2. Disable them by using Device Manager.
   3. Disable them by using System Configuration.
   4. Enable ReadyBoost.
6. Which of the following tools can be used for patch management? (Choose all that apply.)
   1. WSUS
   2. SCCM
   3. Automatic Updates
   4. System Configuration

# Chapter 16

1. You are adding a 1-TB hard drive to a Windows 7–based system. Which file system should you use for the best performance?
   1. FAT16
   2. FAT32
   3. FAT64
   4. NTFS
2. A user asks what tool he can use to create a mirrored volume on a Windows 7–based system. What would you tell him?
   1. You cannot create a mirrored volume on Windows 7.
   2. Use Disk Management.
   3. Use Windows Explorer.
   4. Use Convert.
3. You have added a new disk drive to a Windows 7–based system, but it is not recognized. What needs to be done?
   1. The disk needs to be converted to NTFS.
   2. The disk needs to be converted to dynamic.
   3. The disk needs to be imported.
   4. The disk needs to be initialized.
4. You want your DVD player to be assigned the letter M within the operating system. What tool would you use?
   1. Disk Defragmenter
   2. Device Manager
   3. Windows Explorer
   4. Disk Management
5. You suspect the D partition on a disk drive has a problem, and you want to check it forbad sectors, recover readable information, and fix errors. What command would you use?
   1. chkdsk d:
   2. chkdsk d: /f
   3. chkdsk d: /r
   4. Check Disk d:
6. A computer is slow, and the disk drive LED is constantly blinking. What can be done to improve the performance?
   1. Run chkdsk.
   2. Format the drive as NTFS.
   3. Shrink the volume.
   4. Run defrag.

# Chapter 17

1. You need to start Windows 7 in safe mode. What should you do?
   1. Reconfigure the Boot.ini file.
   2. Restart it, and press F8 as it starts.
   3. Run bootrec /safemode.
   4. Select Safe Mode from Task Manager.
2. After installing a new driver, a user’s system is caught in a reboot loop. Which of the following choices would be the easiest way to restore the system?
   1. Perform an image recovery.
   2. Start safe mode and roll back the driver.
   3. Start safe mode and revert to a previous restore point.
   4. Use Last Known Good Configuration.
3. A Windows 7–based system fails, showing a blue screen, but restarts before you can view the error. What should you do?
   1. Modify the Startup and Recovery boot options.
   2. Modify the options from the Advanced Boot Options menu.
   3. Boot into safe mode, and view the Ntbtlog.txt file.
   4. Reboot the system by using the System Repair disc.
4. A user complained that he saw an error message and then his system failed. He doesn’t remember what the message said. How can you identify the contents of the error message?
   1. Use Task Manager.
   2. Use Performance Monitor.
   3. Use Event Viewer.
   4. Use Device Manager.
5. After booting a Windows XP-based system, you see an error indicating that NTLDR is missing. Of the following choices, which has the best possibility of resolving this problem?
   1. Run the fixmbr command from the recovery console.
   2. Run the System Repair utility.
   3. Format the disk with diskpart.
   4. Run the bootrec /fixmbr command from the Windows RE.
6. A Windows 7–based system fails to boot and gives a “Missing Operating System” message. Of the following choices, which has the best chance of resolving this problem?
   1. Run the fixboot command from Windows RE.
   2. Run the bootrec /fixboot command from Windows RE.
   3. Rebuild the Boot.ini file.
   4. Download a replacement Regsvr32.dll file.

# Chapter 18

1. You want to connect a network in one office to a network in an office in a separate city. What are you creating, and what device do you need to connect the two offices?
   1. You’re creating a WAN, and you need routers.
   2. You’re creating a WAN, and you need switches.
   3. You’re creating a LAN, and you need routers.
   4. You’re creating a PAN, and you need switches.
2. After replacing a faulty switch with an older switch on their 100-Mbps network, users complain that the network connections are slow. Of the following choices, what is the most likely problem?
   1. The switch is configured to use 1 Gbps.
   2. The switch’s ports are disabled.
   3. The switch is not autosensing the speed of the network.
   4. The switch is running in WAN mode.
3. Computers connected on a network through a switch can no longer communicate with each other. You notice all the lights are steady. What should you do?
   1. Replace all the computers.
   2. Replace all the cables.
   3. Reboot the computers.
   4. Turn the switch off and then back on.
4. After adding a new computer to a network, you realize the computer is the only one that can’t communicate with other devices on the network. You verified the cable to the switch is good. Of the following choices, what should you do next?
   1. Replace the NIC.
   2. Replace the computer.
   3. Verify the port on the switch is enabled.
   4. Power cycle the switch.
5. Which of the following Internet connections uses different speeds for uploads and downloads?
   1. DSL
   2. ADSL
   3. SDSL
   4. Dial-up
6. Which of the following connections requires a clear line of sight for devices?
   1. Dial-up
   2. ISDN
   3. Cellular
   4. Satellite

# Chapter 19

1. Of the following choices, what can a technician employ to easily identify connections for devices?
   1. Shielding
   2. Cable management
   3. Fibre optic cable
   4. Plenum-safe cable
2. What type of cable should you use in spaces used for air conditioning?
   1. Twisted-pair
   2. Fibre
   3. Coaxial
   4. Plenum-safe
3. What mode allows data to travel in both directions at the same time?
   1. Simplex
   2. Half-duplex
   3. Full-duplex
   4. MDIX
4. What type of connector will you find on a twisted-pair cable connected to a switch?
   1. RJ-11
   2. RJ-45
   3. BNC
   4. LC
5. Which category cable is the minimum recommended to support speeds of 1,000 Mbps?
   1. CAT 3
   2. CAT 5
   3. CAT 5e
   4. CAT 6
6. What type of cable would you use to connect two computers together that have RJ-45 ports?
   1. Twisted-pair crossover cable
   2. Twisted-pair straight-through cable
   3. Fibre crossover cable
   4. Fibre straight-through cable
7. What type of connector will you find on a fibre optic cable?
   1. RJ-11
   2. RJ-45
   3. BNC
   4. LC

# Chapter 20

1. Of the following choices, what is a difference between TCP and UDP?
   1. UDP provides guaranteed delivery, but TCP does not.
   2. TCP provides guaranteed delivery, but UDP does not.
   3. TCP is connection-oriented, but UDP does not use wires.
   4. UDP uses a three-way handshake, but TCP does not.
2. Which of the following protocols is used to receive email by a user?
   1. POP
   2. SMTP
   3. FTP
   4. RDP
3. Which of the following protocols uses port 143?
   1. IMAP
   2. SMTP
   3. POP
   4. HTTPS
4. Which of the following are the correct ports for HTTP and HTTPS?
   1. 22 and 25
   2. 80 and 143
   3. 80 and 443
5. What protocol could you use to encrypt FTP traffic?
   1. HTTPS
   2. TFTP
   3. RDP
   4. SSH
6. What service provides the IP address of a computer when queried with the name of the computer?
   1. FTP
   2. SMTP
   3. DNS
   4. SSL
7. What port should be opened on a firewall to allow a user to connect to a system using RDP?
   1. 69
   2. 143
   3. 443
   4. 3389
8. You are troubleshooting an email problem for a user. The mail server is named mail, and you suspect that it is not answering SMTP queries. Which of the following commands can you use from the command prompt to test it?
   1. SMTP mail 23
   2. SMTP mail 25
   3. Telnet mail 23
   4. Telnet mail 25
   5. 443 and 3389

# Chapter 21

1. Which of the following is a Class C IPv4 address?
   1. 10.1.2.3
   2. 127.0.0.1
   3. 172.16.5.4
   4. 192.168.1.21
2. Which of the following would be appropriate to assign to a client in a private network?
   1. 10.1.1.1
   2. 198.162.6.1
   3. 173.16.2.3
   4. 127.0.0.1
3. A system has an IP address and subnet mask combination such as the following: 192.168.1.5 255.255.255.0. Which of the following would be a valid IP address for the default gateway?
   1. 255.255.255.255
   2. 192.168.1.1
   3. 192.168.15.1
   4. 192.168.1.0
4. A system is unable to access any network resources. You check the IP address and see that it includes the following information:

IP address: 169.254.34.78

Subnet mask: 255.255.0.0

Default gateway: blank

What is the most likely problem?

* 1. DHCP
  2. IP address is wrong
  3. Subnet mask is wrong
  4. Default gateway is down

1. Which of the following would most often have manually assigned IP addresses?
   1. Windows 7–based computers in a SOHO
   2. Windows 7–based computers in a large domain
   3. Servers and network printers
   4. Servers and USB attached printers
2. Which of the following is a valid IPv6 address?
   1. FC00:0:0:76:0:0:042A:B95F:77F5
   2. FC00::0157:03CE::A47:52AF
   3. FC00:76::4234:BF:F5
   4. FC00:0000:1200:2076:0000:42A4:C95G:F523
3. Which of the following is the loopback address for IPv6?
   1. 127.0.0.1
   2. ::1
   3. 192.168.1.1
   4. 255.255.255.255

# Chapter 22

1. You are hosting a website on your home network, and you want to be able to access it when you’re away from home. Of the following choices, what can you use to meet your goal?
   1. Port forwarding
   2. Port triggering
   3. A proxy server
   4. A Public network location
2. You successfully removed a virus from a user’s computer, and a virus scan shows that it is clean. However, the user no longer has Internet access. What is the most likely reason?
   1. The Windows Firewall is enabled.
   2. The proxy settings for the browser are incorrect.
   3. Port forwarding has been disabled.
   4. The computer has been reconfigured for the Home location.
3. A user has configured four Windows 7 Professional–based computers in a SOHO but has not been able to get homegroups to work. Of the following choices, what is the most likely reason?
   1. Homegroups are not supported on Windows 7 Professional.
   2. The Windows Firewall is enabled on the computers.
   3. The Network location is set to Home.
   4. The Network location is set to Work.
4. You just connected to a wireless network in a coffee shop and plan on doing some work. You’re prompted to choose a network location. What should you select?
   1. Home
   2. Work
   3. Public
   4. Private
5. You recently installed a program on a Windows 7–based computer that requires port 4545 to be opened on the firewall. What program would you use to configure it?
   1. Windows Firewall
   2. Remote Desktop
   3. Network Discovery
   4. Windows Firewall With Advanced Security
6. You are helping a small business owner increase network security. The owner is willing to purchase a product to protect against malicious Internet traffic but wants to minimize maintenance. What would you suggest to provide the greatest security?
   1. Install a router.
   2. Install a firewall.
   3. Install a network security appliance.
   4. Install an Internet appliance.

# Chapter 23

1. What is the maximum speed of 802.11g?
   1. 11 Mbps
   2. 54 Mbps
   3. 300 Mbps
   4. 600 Mbps
2. Which of the following protocols uses multiple input multiple output (MIMO) antennas?
   1. 802.11a
   2. 802.11b
   3. 802.11g
   4. 802.11n
3. Which of the following protocols operate at 2.4 GHz? (Choose all that apply.)
   1. 802.11a
   2. 802.11b
   3. 802.11g
   4. 802.11n
4. Users regularly connect to a WLAN by using 802.11g. However, excessive interference is seriously degrading the connection. What can they do to improve performance?
   1. Disable the SSID broadcast
   2. Upgrade the network to 802.11b
   3. Configure the wireless router to use WPA2
   4. Change the channel used by the wireless router
5. You are configuring a wireless router. Which security type provides the highest level of security?
   1. WEP
   2. WPA
   3. WPA2
   4. 802.11n
6. You want to restrict which computers can access a wireless network. What can you do?
   1. Enable MAC filtering
   2. Change the default SSID
   3. Enable SSID broadcast
   4. Upgrade the firmware on the wireless network
7. What can you do to partially hide a wireless network?
   1. Disable WEP
   2. Disable WPA2
   3. Disable MAC filtering
   4. Disable SSID broadcast
8. You have just installed a wireless router for a new wireless network. Of the following choices, what should be one of the first things you do?
   1. Check the range of the wireless network
   2. Change the channel used by the router
   3. Change the default administrator password
   4. Upgrade the firmware

# Chapter 24

1. What should be enabled on a wireless router to ensure that all internal users are assigned IP addresses?
   1. DNS
   2. DHCP
   3. NAT
   4. VoIP
2. You are managing a network with 15 Windows 7 Home Basic and Windows 7 Professional–based systems. You are trying to create a homegroup on a Windows 7 Home Basic–based system, but it is not working. Why not?
   1. Homegroups cannot be created on networks with more than 10 systems.
   2. Homegroups can be created only on Windows XP systems.
   3. You cannot create homegroups on networks that include Windows 7 Home Basic.
   4. You cannot create a homegroup on a Windows 7 Home Basic–based system.
3. Which of the following commands can you use to check connectivity with a remote system? (Choose all that apply.)
   1. Ping
   2. Tracert
   3. Ipconfig
   4. Net use
4. You’re troubleshooting a computer, and you want to verify that the computer can connect to another system on the network. Which of the following would you use?
   1. Ping 127.0.0.1.
   2. Ping loopback.
   3. Ping the address of the default gateway.
   4. Ping the address of the subnet mask.
5. You suspect that DHCP has assigned a user’s system an IP address that is used by another system on the network. Which of the following commands can you use to force the system to get a new IP address from DHCP?
   1. Ping dhcp -4
   2. DHCP /force
   3. Ipconfig /release and ipconfig /renew
   4. Ipconfig /force
6. A user is unable to connect to a remote server in a large network with several routers. What tool can you use to list all the routers between the user’s system and the server?
   1. Tracert
   2. Ping
   3. Arp
   4. Net Trace
7. Which of the following commands will show the following result?

192.168.1.1 68-7f-74-ae-8b-de dynamic

* 1. Ping DC1
  2. Ipconfig /all
  3. Arp -a
  4. Netstat -a

1. Which of the following commands can map a drive to a share on a remote computer?
   1. Netstat
   2. Net use
   3. Nslookup
   4. Arp
2. You have connected a computer with a switch. However, you don’t have any connectivity and the LED lights are not lit on either the NIC or the switch. You’ve verified that the switch and the computer are functioning. What tool would you use as the next step?
   1. Nslookup
   2. Tracert
   3. Homegroup
   4. Cable tester

# Chapter 25

1. Which one of the following passwords is the strongest?
   1. apluscertified
   2. IPassedAPlus
   3. IPa$$ed!!
   4. IPa$$ed801
2. Which of the following provides the strongest authentication?
   1. Strong passwords
   2. Retinal scans
   3. Smart cards
   4. RSA tokens
3. A user was first assigned as a member of the Sales group and later added to the Managers group. What are the effective permissions of the user?
   1. Only permissions assigned to the Sales group.
   2. Only permissions assigned to the Managers group.
   3. A combination of permissions from both groups.
   4. Only permissions granted to both groups.
4. Of the following choices, when will directly assigned permissions stay the same?
   1. When a file is copied to a new location on a volume.
   2. When a file is copied to a different volume.
   3. When a file is moved to a new location on a volume.
   4. When a file is moved to a different volume.
5. What is the benefit of encrypting data with NTFS?
   1. It helps prevent unauthorized users from viewing it.
   2. It helps prevent unauthorized users from copying it.
   3. It ensures that the data stays hidden.
   4. It ensures that the data is not modified.
6. Which of the following methods provides the strongest sanitization of a hard disk?
   1. Formatting the disk with the format command.
   2. Low-level format writing zeros.
   3. Physical destruction.
   4. Deletion of individual files.

# Chapter 26

1. Which of the following can spread without user interaction?
   1. Virus
   2. Worm
   3. Trojan horse
   4. Botnet
2. After installing a free game, a user’s system began acting erratically. It showed unusual errors and was randomly rebooting. What does this describe?
   1. Worm
   2. Rogueware
   3. Trojan horse
   4. Spam
3. Lori received an email that indicates it’s from her bank, saying there is a problem with her account. The email asks her to verify her account information. What best describes this?
   1. Trojan horse
   2. Spyware
   3. Adware
   4. Phishing email
4. A user hasn’t connected to the Internet in several weeks. The user was recently infected with a virus from a USB even though the user has AV software installed. What should be done?
   1. Purchase newer AV software.
   2. Reinstall the operating system.
   3. Update the AV software definitions.
   4. Enable the Windows Firewall.
5. A user has AV software installed, and the software previously ran all the time. However, it no longer starts automatically. What’s the likely reason?
   1. The software has been removed.
   2. The service is set to disabled.
   3. It’s configured to start only in Safe Mode.
   4. Windows Defender is running.
6. A user’s system is infected with a virus, and the virus is preventing the AV software from obtaining up-to-date definitions for installed AV software. What should be done? (Choose all that apply.)
   1. Start in Safe Mode and download the definitions.
   2. Start in Safe Mode With Networking and download the definitions.
   3. Download the definitions on another computer and copy them to the infected computer.
   4. Use System Restore to return your system to a previous state.
7. You have discovered a malicious file on your computer. When you try to delete it, the system reports that the file is in use and prevents the deletion. What should you do?
   1. Start the Action Center and delete it from there.
   2. Delete the file from the command prompt.
   3. Boot into BIOS and disable password protection.
   4. Boot into Safe Mode and then delete the file.