

1. What is the proper way to remove a PCMCIA card from a laptop?
 - A. Press the eject button next to the PCMCIA card
 - B. Locate the "Safely Remove Hardware" icon, right-click it and stop the device, then eject the card
 - C. Disable the PCMCIA service in the Control Panel, then eject the card
 - D. Access the BIOS and disable the device, then eject the card

Answer: B.

Explanation: PCMCIA cards (more accurately PC Cards) need to be safely removed in the OS prior to physical removal. Always use the Safely Remove Hardware icon in the Notification Area before physically removing a PC Card or USB device. There is no need to disable any services; in fact there is no PCMCIA service in today's Windows operating systems. Also, there is no reason to access the BIOS if you simply want to remove the PC Card. Be sure to know how to safely remove PC Cards and USB devices step-by-step in Windows.

2. You just installed a new serial port card in a computer. Now, the communication parameters need to be configured. What is the most common configuration for the new serial port?
 - A. Eight data bits, no parity, one stop bit
 - B. Seven data bits, no parity, one stop bit
 - C. Eight data bits, even parity, two stop bits
 - D. Seven data bits, even parity, one stop bit

Answer: A

Explanation: The most common configuration is: Eight data bits, no parity, one stop bit. In this scenario you have installed a dial-up modem (the serial port card.) In order for it to communicate, it requires special parameters. Many cards will auto-configure. The eight data bits refers to the amount of bits per data byte that are sent. Eight bits per byte is very common. Parity can slow down a communication system as it attempts to detect errors, so it is usually turned off. In dial-up communications a stop bit is appended to the end of each set of 8 data bits. This tells the receiving modem that the byte of data has ended. This is an example of asynchronous communications, where there is no clocking circuit, and therefore a bit (or flag) must be placed at the end of each byte of data. Dial-up modems are known for asynchronous transmission of data as well as the conversion of digital signals (from the computer) to analog signals (to be sent on the phone line.)

3. Which of the following configurations is controlled by jumpers?

- A. Fan speed
- B. Chassis detection threshold
- C. Drive hierarchy
- D. USB voltage

Answer: C

Explanation: Drive hierarchy is the only listed answer that can be controlled by jumpers. An example of this is the master/slave configurations on IDE drives. Fan speed, voltage parameters, and other configurations have been controlled by jumpers in the old days, but today's computers have very little in the way of jumpers on the motherboard. These settings are controlled by, and configured in, the BIOS.

4. In older laptop displays, what is the backlight powered by?

- A. Gas
- B. CCFL lamp
- C. LEDs
- D. OLEDs

Answer: B

Explanation: Cold-cathode fluorescent lamps (CCFL lamps) provide the backlight for older laptop displays. Newer displays often opt for light-emitting diodes (LEDs) and organic LEDs are emerging technology as of the writing of this book. Gas is used by plasma screens which require more power than LCD and LED, and therefore are used less often.

5. You are investigating an "NTLDR is missing" error message on a Windows XP computer. What command can possibly resolve the problem?

- A. CHKDSK
- B. DEFRAG
- C. SCANDISK
- D. FIXBOOT

Answer: D

Explanation: Try the FIXBOOT command. If the NTLDR file is missing, it could mean that the boot sector has been damaged. The FIXBOOT command can repair the boot sector, but this must be done from the Recovery Console in Windows XP. Another similar command is FIXMBR, which will repair the Master Boot Record. You can also try copying the NTLDR file directly from the

XP CD to the hard drive. CHKDSK and the older SCANDISK are disk checking tools but will not repair system files. DEFRAG is used to defragment a hard drive. On a Windows 7 computer, the `bootrec /fixboot` command is the equivalent of Windows XP's FIXBOOT.

6. One of your customers tells you that the computer screen is flickering at a rapid rate. Which Control Panel path should you use to fix the problem?

- A. Display > Settings > Resolution
- B. Display > Settings > Advanced > General > DPI
- C. Display > Appearance > Effects > Transition
- D. Display > Settings > Advanced > Adapter > Refresh

Answer: D

Explanation: The correct path is: Display > Settings > Advanced > Adapter > Refresh. This scenario is referring to a Windows XP computer. Once in the Adapter tab of the Advanced Display Properties dialog box, you can List All Modes and modify the Refresh rate. Perhaps it is set to 72 Hz, but the monitor can't handle that amount, and it needs to be reconfigured to 60 Hz. Even if you don't know all of the paths listed in the answers by heart, the key here is that the screen is flickering: this usually means a refresh issue. Incorrect resolution would either cause text/images to be too big or small, or a completely garbled screen. DPI stands for dots per inch—the default is 96 DPI, but this can also be set to 120 DPI, which would make the text and fonts bigger, or a custom setting altogether. Transitions refer to fade effects, and cascading drop-down menus for example.

7. You are having issues booting a newly built PC. You notice the following jumper configurations on each IDE device:

- Hard drive: Master
- Optical drive: Cable Select

Which of the following jumper configuration should you modify this to?

- A. HD: Slave, Optical Drive: Slave
- B. HD: Cable Select, Optical drive: Master
- C. HD: Cable Select, Optical drive: Cable Select
- D. HD: Master, Optical drive: Master

Answer: C

Explanation: The best answer listed is that both should be set to Cable Select, allowing both to exist on the same cable. Another possible option

would be to have the HD as master and the optical drive as slave, allowing the system to boot off the hard drive, but again enabling both drives to coexist on the same cable. If you use Cable Select for one drive on the cable, use it for the rest. You can not have two masters or two slaves on one IDE cable. This will result in a "No boot device found" message, or similar error. Remember that the terms IDE and PATA might be used interchangeably.