Chapter 11

Reviewing the Basics

1. Why are notebooks usually more expensive than desktop computers with comparable power and features?

Notebooks use compact hard drives that can withstand movement even during operation, and small memory modules and CPUs that require less voltage than regular components. In general, it costs more to make similar components that take up less space and require less power.

2. Why is the service manual so important to have when you disassemble a notebook?

The service manual for the notebook model explains how to open the case and remove components without damaging the case or components. Each notebook model is proprietary in design and the ways to disassemble a notebook vary widely.

3. Why is it important to reinstall the OS on a notebook from the recovery media rather than using a retail version of the OS?

Because the recovery media contains the OS build and device drivers specific to the notebook

4. Which has more features, a port replicator or a docking station?

Docking station

5. What type of bus is used by ExpressCard slots?

PCI Express

6. Can you use an ExpressCard card in a CardBus slot? In a PC Card slot?

No, no

7. What prevents a CardBus card from being inserted in a 16-bit PC Card slot?

A bumpy strip on the end of the card

8. What type of technology is used by battery packs for notebooks?

Lithium Ion

9. To what ACPI mode does Windows 7 sleep mode correspond? Windows 7 hibernation?

S3 mode, S4 mode

10. Which port do you use to connect a docking station to a notebook?

Docking port

11. Why is it not necessary to set up two hardware profiles in Windows 7 for a notebook to use or not use a docking station?

Because Windows 7 automatically senses when a docking station is present

12. How many pins does a DDR3 SO-DIMM have? A DDR2 SO-DIMM?

204 pins, 200 pins

13. When a notebook internal device fails, what three options can you use to deal with the problem?

Return the notebook to a service center for repair

Substitute an external component for the internal component

Replace the internal component

14. How many pins does a notebook IDE connector have? A desktop IDE connector?

44 pins, 40 pins

15. When an LCD panel is very dim and brightness adjustments don't help, what component is likely to be the problem?

The video inverter

16. After you have removed the AC adapter and all peripherals, what is the next component you should always remove before servicing any internal notebook components?

The battery pack

17. How many pins does a Mini PCIe card have?

52 pins

18. What three wireless technologies might be provided by a Mini PCIe card?

Wi-Fi wireless, cellular WAN, and Bluetooth

19. Which mobile processor socket is currently the most popular by Intel? By AMD?

FCPGA988 socket, S1 socket

20. What is one cause of a ghost cursor on an LCD screen?

Bad video drivers. Try updating the video drivers

Thinking Critically

1. Your friend has a Windows XP notebook computer and has purchased Windows 7 and installed it as an upgrade on his notebook. He calls to tell you about the upgrade and says that he cannot connect to the Internet. His notebook has an embedded Ethernet port that he uses for communication. What do you tell him to do?
   a. Reinstall Windows XP.
   b. Using another computer, download and install the Windows 7 Ethernet drivers from the notebook manufacturer's web site.
   c. Search the CDs that came with the notebook for Windows 7 Ethernet drivers and install them.
   d. Perform a clean install of Windows 7.

The problem is that he has not installed Windows 7 drivers for the on-board port. It is unlikely the notebook's drivers CD for Windows XP will contain Windows 7 drivers. The solution most likely to work is to attempt to use the web site of the notebook manufacturer to identify the Ethernet port and locate the Windows 7 drivers for the modem.

2. A friend asks you for help in determining the best product to buy: a notebook, tablet PC, or smart phone. She is a paralegal and spends a lot of time at the courthouse researching real estate titles. She wants a device to take notes with as she works. List three questions you would ask her to help her make her decision.

Answers may vary. Possible answers:

- How extensive are the notes you want to take?
- What type of notes do you take (text, drawings, or both)?
- How much money do you want to spend?

3. What type of computer is likely to use SO-DIMMs, have an internal power supply, and use a desktop processor socket?

Answer: An all-in-one computer