

Chapter 12

Reviewing the Basics

1. Which two methods of rendering a print job are done in Windows before the page is sent to the printer? Which of these two methods was introduced with Windows Vista?

GDI and XPS. XPS was introduced in Windows Vista.

2. Which two printing languages are used to send a print job to a printer and the printer uses these languages to render a print job before it is printed?

PostScript and PCL

3. List the seven steps used by a laser printer to print a page.

1. Processing. The print job is rendered and a bitmap of the page is created.
2. Charging. The drum is conditioned to contain a high electrical charge.
3. Exposing. A laser beam discharges the high charge down to a lower charge, but only in places where toner should go.
4. Developing. Toner is placed onto the drum where the charge has been reduced.
5. Transferring. A strong electrical charge draws the toner off the drum onto the paper.
6. Fusing. Heat and pressure fuse the toner to the paper.
7. Cleaning. The drum is cleaned of any residual toner and electrical charge.

4. Which document exhibits better quality, one printed with 600 dpi or one printed with 1200 dpi? Why?

1200 dpi. The more dots per inch, the more detail you can print and the finer the resolution.

5. During the laser printing process, what determines when the toner sticks to the drum and when it does not stick to the drum?

During the writing phase, the uniform high charge is discharged only in the places where toner is meant to stick to the drum.

6. What type printer is most dependent on the quality paper it uses to get the best printing results?

Inkjet printer

7. What should you do if an inkjet printer prints with missing dots or lines on the page?

Clean the inkjet nozzles (manually for older inkjet printers or automatically for newer ones).

8. What can you do to help a dot-matrix printer last longer?

Keep the print head cool

9. What feature on a printer must be enabled so that a printer can automatically print on both sides of the paper?

Duplex printing

10. What two Windows XP components are used to share resources on a network and access those shared resources?

Client for Microsoft Networks and File and Printer Sharing

11. Using Windows 7, how do you share a local printer with others on the network?

In the Devices and Printers window, right-click the printer you want to share and select Sharing from the shortcut menu.

12. What is likely to be the problem when a laser printer consistently produces pages with gray print?

The image drum is worn out and needs replacing

13. What kind of printer is assigned an IP address?

A network printer

14. What two tools can you use to remove loose toner from inside a printer?

A toner vacuum and an extension magnet brush

15. Where is the best place to look for a firmware upgrade for a printer?

The printer manufacturer's web site

16. How can you prove a printer problem is not with the printer itself, but lies with the network, computer, OS, or application?

Print a self-test page using printer controls

17. When you get a toner-low message, what can you do to extend the life of the toner cartridge before you replace the cartridge?

Gently shake the toner cartridge to redistribute the toner

18. What causes a ghosted image on a printout?

The drum is not fully cleaned

19. What is likely the problem when a portion of a complicated page does not print?

The printer does not have enough memory

20. What can you do to verify a printing problem is with an application or a document and not with Windows?

Print a Windows test page

Thinking Critically

1. You are not able to print a Word document on a Windows 7 computer to a network printer. The network printer is connected directly to the network, but when you look at the Devices and Printers window, you see the name of the printer as \\SMITH\HP LaserJet 8100. In the following list, select the possible sources of the problem.
 - a. The SMITH computer is not turned on.
 - b. The HP LaserJet 8100 printer is not online.
 - c. The SMITH printer is not online.
 - d. The Windows 7 computer has a stalled print spool.
 - e. The HP LaserJet 8100 computer is not logged on to the workgroup.

Answer: The printer is installed as a shared printer and not a network printer. The sources of the problem might be: a, b, and d

2. You are not able to print a test page from your Windows 7 computer to your USB local HP DeskJet printer. Which of the following are possible causes of the problem?
 - a. The network is down.
 - b. The printer cable is not connected properly.
 - c. The Windows print spool is stalled.
 - d. You have the wrong printer drivers installed.
 - e. File and Printer Sharing is not enabled.

Possible answers: b, c, and d