

---

## COMPUTER PROBLEM SOLVING

### Overview

This event provides recognition for FBLA members who have a broad base of knowledge and competencies in core hardware and operating system technologies including installation, configuration, diagnostics, preventative maintenance, and basic networking.

This is an individual online test.

### Competencies and Task Lists

<http://www.fbla-pbl.org/docs/ct/FBLA/COMPUTERPROBLEMSOLVING.pdf>

### Website Resources

- A+ Essentials Hardware Practice Questions  
<http://www.simulationexams.com/SampleQuestions/aplus-questions.htm>
- Basic Computer Terminology  
[http://www.zerocut.com/tech/c\\_terms.html](http://www.zerocut.com/tech/c_terms.html)
- How PCs Work  
<http://computer.howstuffworks.com/pc.htm>
- How Operating Systems Work  
<http://computer.howstuffworks.com/operating-system.htm>
- Inside the Computer Case  
<http://www.pccomputernotes.com/inside.htm>

---

## COMPUTER PROBLEM SOLVING SAMPLE QUESTIONS

1. What is the most likely consequence of a sudden power outage?
  - a. lost data
  - b. monitor damage
  - c. modem damage
  - d. RAM damage

**Competency:** Personal Computer Components

2. You install a SCSI 2 Ultra host adapter with four drives. After you bring up the system you notice that only two drives are detected. What is the likely cause for this problem?
  - a. the hard drives have been configured with the same SCSI ID
  - b. both drives have failed
  - c. the host adapter has failed
  - d. the devices were not terminated

**Competency:** Personal Computer Components

3. A 3xx POST error code indicates a problem with the:
  - a. mouse
  - b. video adapter
  - c. floppy drive
  - d. keyboard

**Competency:** Personal Computer Components

---

4. What is the data rate of a USB port?

- a. 12 Mbps
- b. 120 Mbps
- c. 16 Mbps
- d. 100 Mbps

**Competency:** Personal Computer Components

5. You bring up a newly installed server for the first time; however, **none** of the devices on the SCSI bus are recognized. What is the problem?

- a. One of the SCSI devices is not functioning.
- b. The SCSI host adapter was set to ID 7.
- c. The boot device was set to SCSI ID 0.
- d. The SCSI bus was not properly terminated.

**Competency:** Personal Computer Components

6. In the event of a power outage, what is an UPS designed to do?

- a. keeps computer running until power is restored
- b. allows the computer to shut down safely
- c. power notebook computer
- d. generates power

**Competency:** Personal Computer Components

7. Maximum USB cable length is:

- a. 5 meters
- b. 25 meters
- c. 18 meters
- d. 10 meters

**Competency:** Laptop and Portable Devices

8. The common 4:3 resolution found in notebook monitors that have an addressable pixel resolution of 1024 X 768 and a viewable area of 12.1 to 15 inches is known as:

- a. WXGA
- b. SXGA
- c. UXGA
- d. XGA

**Competency:** Laptop and Portable Devices

9. Which one of the following laser printer components is responsible for using heat and pressure to melt and bond the toner to the paper?

- a. transfer corona wire
- b. drum
- c. fusing unit
- d. pickup roller

**Competency:** Printers and Scanners

---

10. What is the best solution to the problem of having a bi-directional driver and printer, but a uni-directional cable?

- a. disable bi-directional printing in the printer itself
- b. disable bi-directional printing in the CMOS
- c. get a bi-directional cable and install it
- d. disable bi-directional printing in the printer setup

**Competency:** Printers and Scanners

11. Whenever you install new software, XP creates a:

- a. virtual drive
- b. EULA number
- c. master boot record
- d. restore point

**Competency:** Operating Systems

12. To restore the original registry settings when you first installed Windows, from the Emergency Repair Disk, which option would you use to restore the registry?

- a. press F for fast repair
- b. press A for repair all
- c. press R for registry repair
- d. press M for manual repair

**Competency:** Operating Systems

13. What's the best way to protect your hard drive data?

- a. run chkdsk at least once a week
- b. run scandisk at least once a week
- c. regular backups
- d. run a regular diagnostic

**Competency:** Operating Systems

14. Which utility can speed up the performance of your machine?

- a. DEFRAG
- b. MSD
- c. CHKDSK
- d. SCANDISK

**Competency:** Operating Systems

15. A customer who just bought a computer from you yesterday calls frantically. He tells you the computer says he performed an illegal operation. What do you tell him?

- a. Bring the computer in for repair.
- b. Explain that he told the CPU to do something that the CPU can't do. Tell him not to do it again.
- c. Choose OK and restart the program.
- d. Tell him he's got a virus.

**Competency:** Operating Systems

- 
16. When you double click on a short cut that appears on the Windows Desktop why does the application **not** run?
- a. Desktop shortcuts cannot be used in this way.
  - b. The shortcut file is corrupt and needs to be replaced.
  - c. The program file for that shortcut is corrupt or deleted.
  - d. The short cut has a different icon from the default.

**Competency:** Operating Systems

17. The customer is complaining that the program applications being displayed on the screen are missing lines, details, and other graphics. How should you change the setting?
- a. increase the horizontal setting on the monitor
  - b. increase hardware graphics acceleration
  - c. reduce hardware graphics acceleration
  - d. decrease the vertical display settings on the monitor

**Competency:** Operating Systems

18. Which one of the following terms refers to the snapshot of the system state that is used during a system restore?
- a. event log
  - b. restore point
  - c. registry backup
  - d. system console

**Competency:** Operating Systems

19. Which component is **not** part of the Windows Security Center?
- a. computer Management
  - b. Windows Firewall
  - c. automatic updates
  - d. malware protection

**Competency:** Operating Systems

20. Which utility enables you to reset a computer's network adapter?
- a. network map
  - b. Windows Network Diagnostics
  - c. IPCONFIG
  - d. local area connection

**Competency:** Operating Systems

21. You want to speed up disk-drive access in DOS by reserving a block of RAM and using it to swap data from the hard disk to RAM. Which one of the following allows you to accomplish this?
- a. MSCDEX
  - b. DriveSpace
  - c. SMARTDRV
  - d. Virtual Memory

**Competency:** Operating Systems

---

22. Which is a difference between a Search Engine and a Directory?

- a. Search engines have a search box while directories are not searchable.
- b. Search engines are free while Directories charge money for their services.
- c. Most search engines use spiders while directories do not.
- d. Webmaster can submit their resource to a search engine, but not to a directory.

**Competency: Networks**

23. ISDN stands for:

- a. Interior Sector Direct None
- b. Inferior Sector Data Net
- c. Internal Select Data Nulls
- d. Integrated Services Digital Network

**Competency: Security**

24. The process that verifies that your login and password are correct is:

- a. ACL
- b. verification
- c. authentication
- d. access control

**Competency: Security**

25. How many keys are used in public key encryption to encrypt and decrypt data?

- a. four
- b. three
- c. two
- d. one

**Competency: Security**

26. The computer runs for various periods of time before giving an "out of memory" message. The possible reason is a:

- a. badly seated memory chips
- b. bad power supply
- c. virus
- d. bad hard disk

**Competency: Security**

27. The user says that after downloading a program from the Internet the computer will not boot. What is the first thing to ask the user?

- a. Were any modem errors were reported?
- b. Was the downloaded software compatible with your system?
- c. Did you scan the file for viruses before you opened it?
- d. Is the network used for Internet access?

**Competency: Security**

- 
28. Which one of the following is **not** listed by the FBI National Computer Crime Squad (NCCS) as a computer crime?
- a. installation of network monitoring software
  - b. major computer network intrusion
  - c. intrusion of the public phone system
  - d. pirated software

**Competency:** Security

29. What term defines a computer crime where one person masquerades as someone else?
- a. spoofing
  - b. identity theft
  - c. clone
  - d. sniffing

**Competency:** Security

30. When setting up a user's workstation, the angle of his/her forearm to his/her body should be at which degree?
- a. 180
  - b. 90
  - c. 45
  - d. 30

**Competency:** Safety and Environmental Issues