

Computer Literacy BASICS, 4e: Lesson 1

Computers and Computer Systems

TRUE/FALSE

1. Special-purpose computers are used mostly to control something else, such as a dishwasher or airport radar system.

ANS: T PTS: 1 REF: Mod 1-7

2. Fifty years ago, only a handful of people were computer programmers.

ANS: T PTS: 1 REF: Mod 1-10

3. The components that the computer uses to process data are contained within the hard drive.

ANS: F PTS: 1 REF: Mod 1-11

4. The motherboard is also called the circuit board.

ANS: F PTS: 1 REF: Mod 1-12

5. The motherboard is housed on a tiny silicon chip that contains millions of switches and pathways that help your computer make important decisions.

ANS: F PTS: 1 REF: Mod 1-12

6. The ALU can execute complex tasks, such as what a video game uses to determine what appears on your screen.

ANS: T PTS: 1 REF: Mod 1-13

7. As electricity travels through processor pathways, it turns switches on and off. The absence of electricity represents a 0.

ANS: T PTS: 1 REF: Mod 1-14

8. Fetching is the process of translating the instruction into signals the computer can execute.

ANS: F PTS: 1 REF: Mod 1-17

9. ROM chips are nonvolatile.

ANS: T PTS: 1 REF: Mod 1-18

10. A network drive can be a hard drive or a tape drive located on a computer other than the user's local system.

ANS: T PTS: 1 REF: Mod 1-23

MODIFIED TRUE/FALSE

1. Computers have been around for more than 80 years.

ANS: F

60

Sixty

PTS: 1

REF: Mod 1-5

2. Notebook computers are another term for laptop computers.

ANS: T

PTS: 1

REF: Mod 1-7

3. A mainframe is the fastest type of computer. Government agencies and large corporations use them for specialized applications to process enormous amounts of data.

ANS: F

supercomputer

super computer

PTS: 1

REF: Mod 1-8

4. Arithmetic computations involve comparisons, such as asking the computer to determine if two numbers are equal.

ANS: F, logical

PTS: 1

REF: Mod 1-13

5. The control unit reads and interprets the program instruction and changes the instruction into machine language.

ANS: T

PTS: 1

REF: Mod 1-14

MULTIPLE CHOICE

1. Which of the following is NOT true about the earliest computers?

- | | |
|---|---|
| a. They had less processing power than an iPhone. | c. They were so expensive only major companies or government organizations could afford them. |
| b. They occupied small buildings or entire city blocks. | d. They were first developed in the 1970s. |

ANS: D

PTS: 1

REF: Mod 1-5

2. Data is ____.

- | | |
|--|-------------|
| a. text, numbers, sound, images, or video. | c. output |
| b. information | d. software |

ANS: A

PTS: 1

REF: Mod 1-6

3. The first step in the information processing cycle is ____.

- | | |
|--------------------------------|-------------------|
| a. outputs information | c. inputs data |
| b. stores data and information | d. processes data |

ANS: C PTS: 1 REF: Mod 1-6

4. A computer performs operations use ____ operators such as AND, OR, and NOT.
- a. arithmetic
 - b. simple
 - c. logical
 - d. analytical

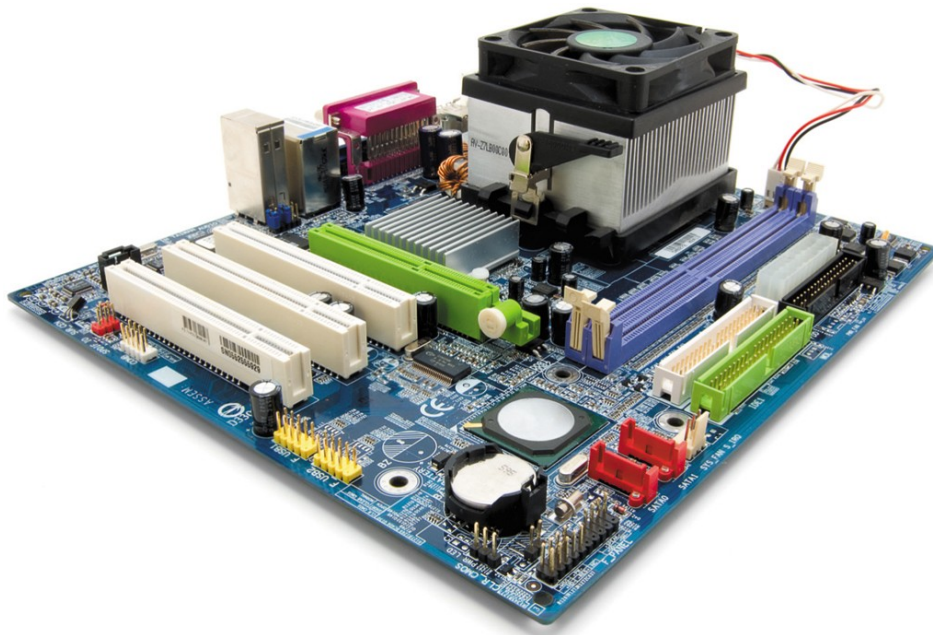
ANS: C PTS: 1 REF: Mod 1-7

5. A computer that delivers Web pages to browsers and other files to applications via the HTTP protocol is considers a ____ server.
- a. file
 - b. Web
 - c. database
 - d. mobile

ANS: B PTS: 1 REF: Mod 1-7

6. The system case includes all of the following EXCEPT ____.
- a. processor
 - b. monitor
 - c. video card
 - d. memory

ANS: B PTS: 1 REF: Mod 1-11



7. The above figure shows an example of a(n) ____.
- a. CPU
 - b. circuit board
 - c. system unit
 - d. motherboard

ANS: D PTS: 1 REF: Mod 1-12

8. CPU stands for Central ____ Unit.
- a. Processing
 - b. Programming
 - c. Port
 - d. Precision

ANS: A PTS: 1 REF: Mod 1-12

9. ____ is a set of special instructions that control the activities of a computer.
- a. A program
 - c. CPU

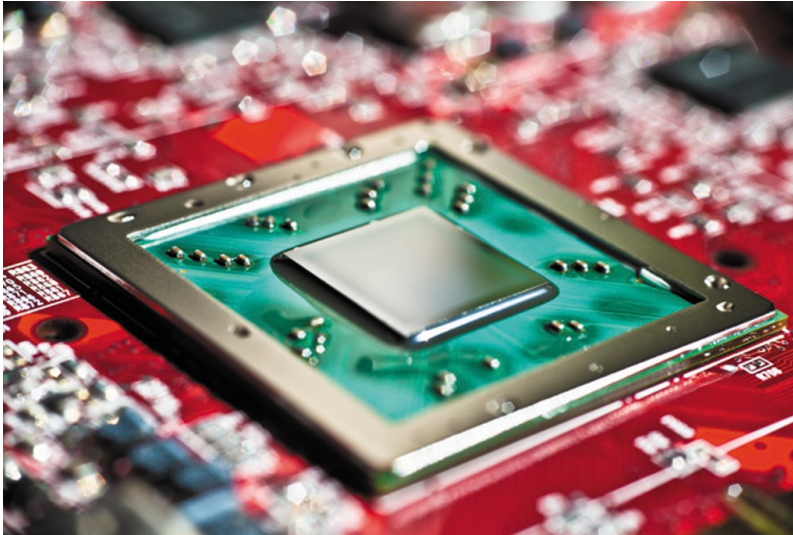
b. Software

d. Both a. and b.

ANS: D

PTS: 1

REF: Mod 1-12



10. The above figure shows an example of a(n) ____.
- a. circuit board
 - b. motherboard
 - c. microprocessor
 - d. expansion port

ANS: C

PTS: 1

REF: Mod 1-13

11. Which of the following is NOT true about microprocessors?
- a. A dual-core processor is a single chip that contains two separate processors.
 - b. Microprocessor speed is generally measured in megahertz (MHz).
 - c. A multicore processor is an expansion that provides for more than two separate processors.
 - d. The switches on a microprocessor control the flow of electricity.

ANS: B

PTS: 1

REF: Mod 1-13

12. Java, COBOL, and C++ are all examples of ____ languages.
- a. programming
 - b. machine
 - c. basic
 - d. binary

ANS: A

PTS: 1

REF: Mod 1-13

13. A ____ is approximately a billion bytes.
- a. kilobyte
 - b. megabyte
 - c. gigabyte
 - d. terabyte

ANS: C

PTS: 1

REF: Mod 1-14

14. RAM stands for ____ Access Memory
- a. Remote
 - b. Return
 - c. Random
 - d. Regular

ANS: C

PTS: 1

REF: Mod 1-16

Gemma starts her computer and begins working on a new Microsoft Word document.

15. When Gemma starts Microsoft Word, the computer loads the word-processing instructions into ____.
- a. RAM
 - b. ROM
 - c. the operating system
 - d. the motherboard

ANS: A PTS: 1 REF: Mod 1-16 TOP: Critical Thinking

16. As Gemma works, the amount of time it takes the CPU to execute an instruction such as printing her document, and store the results in RAM is called the ____ cycle.
- a. machine
 - b. instruction
 - c. processing
 - d. execution

ANS: D PTS: 1 REF: Mod 1-17 TOP: Critical Thinking

Tarun is researching various storage devices.

17. Tarun learns that ____ devices are nonvolatile, removable medium that use integrated circuits.
- a. optical
 - b. solid state
 - c. magnetic
 - d. Blu-ray

ANS: B PTS: 1 REF: Mod 1-22 TOP: Critical Thinking

18. As he learns how to care for his storage media, Tarun discovers that all of the following are true EXCEPT ____.
- a. He should keep media away from magnetic fields.
 - b. He should avoid extreme temperatures.
 - c. He should only remove the media from a drive when the drive indicator light is on.
 - d. He should remove his media from drives when not in use.

ANS: C PTS: 1 REF: Mod 1-23 TOP: Critical Thinking

19. Key drive, thumb drive, and jump drive are all other names for ____.
- a. hard drives
 - b. USB flash drives
 - c. memory sticks
 - d. SD cards

ANS: B PTS: 1 REF: Mod 1-22

20. ____ discs are optical storage media that provide more than five times the storage capacity of traditional DVDs.
- a. CD-ROM
 - b. DVD-R
 - c. Solid state
 - d. Blu-ray

ANS: D PTS: 1 REF: Mod 1-21

COMPLETION

1. In 1980, Bill Gates worked with _____ to develop the disk operating system.

ANS:
IBM
International Business Machines

PTS: 1 REF: Mod 1-5

2. A(n) _____ is an electronic device that receives, process, stores data, and produces a result.

ANS: computer

PTS: 1

REF: Mod 1-6

3. A(n) _____ generally is used by small to medium-size companies and can support a few users or hundreds of users.

ANS: server

PTS: 1

REF: Mod 1-7

4. A computer understands only machine language, or _____ code.

ANS: binary

PTS: 1

REF: Mod 1-13

5. _____ is the process of carrying out commands.

ANS:

Executing

Execution

PTS: 1

REF: Mod 1-17

MATCHING

Identify the letter of the choice that best matches the phrase or definition.

- a. Mobile devices
- b. Tablet PCs
- c. Executing
- d. Decoding
- e. Storing

- 1. The process of carrying out commands.
- 2. Examples include calculators, smart phones, and handheld games.
- 3. Writing the result to memory.
- 4. The process of translating instructions into signals the computer can execute.
- 5. A personal computer similar in size and thickness to a notepad.

- | | | |
|-----------|--------|---------------|
| 1. ANS: C | PTS: 1 | TOP: Mod 1-17 |
| 2. ANS: A | PTS: 1 | TOP: Mod 1-7 |
| 3. ANS: E | PTS: 1 | TOP: Mod 1-17 |
| 4. ANS: D | PTS: 1 | TOP: Mod 1-17 |
| 5. ANS: B | PTS: 1 | TOP: Mod 1-7 |

ESSAY

- 1. Describe the four steps of the machine cycle. How does the speed of the machine cycle affect your computer? How are machine cycles measured?

ANS:

The four steps of the machine cycle are:

1. The control unit fetches the next instruction from memory.
2. The instruction is decoded.
3. The ALU executes the instruction.
4. The result is written to memory.

The faster the machine cycle, the faster your computer processes data. Machine cycles are measured in microseconds, nanoseconds, and even picoseconds.

PTS: 1

REF: Mod 1-18

TOP: Critical Thinking