

*Test Bank for Workplace Software and
Skills 1st Edition by Bolling, Mitchell,
Scott, Wheeler*

ISBN: 9781711470818

Work- place Software and Skills

OpenStax *Workplace Software and Skills* Test Bank

Chapter 1: Technology in Everyday Life and Business

Review Questions

Multiple Choice

1. What was the weight of Z1, the first modern computer?
A. Z1 weighed over 2,500 pounds, which is about 500 times the weight of today's average laptop computer.
B. Z1 weighed over 2,000 pounds, which is about 400 times the weight of today's average laptop computer.*
C. Z1 weighed over 1,500 pounds, which is about 300 times the weight of today's average laptop computer.
D. Z1 weighed over 1,000 pounds, which is about 200 times the weight of today's average laptop computer.

LO: 1.1.1

Difficulty: Easy

2. Based on the percentage of women in the U.S. workforce, should a higher percentage of women work in STEM fields?
A. Yes. Women comprise about 45 percent of the U.S workforce, but less than 25 percent of STEM field employees are women.
B. No. Women comprise about 45 percent of the U.S workforce, and about 45 percent of STEM field employees also are women.
C. Yes. Women comprise about 50 percent of the U.S workforce, but less than 30 percent of STEM field employees are women.*
D. No. Women comprise about 50 percent of the U.S workforce, and about 50 percent of STEM field employees also are women.

LO: 1.1.1

Difficulty: Difficult

3. Why was Xerox's Alto computer considered revolutionary?
A. It included a screen with elements, such as folders and buttons, which were controllable with a mouse.*
B. It was the first microcomputer that was usable and affordable to average consumers.
C. It introduced the floppy disk, which provided the means to easily store and move data.

For more free, peer-reviewed, openly licensed resources visit [OpenStax.org](https://openstax.org).



D. It was the first computer that offered applications for use in fields other than science and engineering.

LO: 1.1.1

Difficulty: Moderate

4. Before the late 1990s and early 2000s, many people did not see the value of owning a personal computer for home use. What changed their minds?
- A. expansion of the internet, improved interfaces, and customizable features*
 - B. lower costs and smaller computer sizes
 - C. better laptops that could be easily moved between home and the office
 - D. the ability to use video features like Zoom to communicate

LO: 1.1.2

Difficulty: Easy

5. Why is an operating system one of the most important components of a computing device?
- A. It allows data to be stored and easily moved from one computing device to another.
 - B. It enables computing devices to operate with a single processing unit, making them smaller and more user-friendly.
 - C. It creates customizable features for users, such as color schemes.
 - D. It handles the interactions between the hardware and software components of a computing device.*

LO: 1.1.4

Difficulty: Moderate

6. How is robotics distinguished from automation?
- A. Robotics is the process of using computers or machines to complete tasks that humans can do, while automation refers to machines that can be programmed to complete tasks that humans cannot do.
 - B. Robotics includes machines that can be programmed to complete tasks that humans cannot do, while automation is the process of using computers or machines to complete tasks that humans can do.*
 - C. Robotics can be both a technical and mechanical process, while automation is strictly a mechanical process.
 - D. Robotics is generally limited to manufacturing processes, while automation can be used in all industries.

LO: 1.1.4

Difficulty: Easy

7. In the workplace, which essential skills *cannot* be replicated by technology?
- A. communication, microprocessing, and creative problem solving
 - B. communication, fostering cross-functional collaborations, and autonomous decision making
 - C. communication, data analysis, and creative problem solving
 - D. communication, fostering cross-functional collaborations, and creative problem solving*

LO: 1.1.5

Difficulty: Easy

8. When you turned on your computer this morning, you couldn't run any of your programs. Which part of your computer may have stopped working?
- A. random access memory (RAM)
 - B. CPU's microprocessor
 - C. motherboard*
 - D. information processing cycle

LO: 1.2.1

Difficulty: Difficult

9. What sequence of events is included in the information processing cycle?
- A. input, programming, microprocessing, and output
 - B. input, data analysis, programming, and output
 - C. input, processing, storage, and output*
 - D. input, logic compilations, processing, and output

LO: 1.2.2

Difficulty: Easy

10. Your computer is taking longer than usual to retrieve information. Which part of your computer likely is not working properly?
- A. motherboard
 - B. hard disk
 - C. information processing cycle
 - D. cache*

LO: 1.2.2

Difficulty: Difficult

11. What is the difference between HTTPS and HTTP?
- A. HTTPS has more RAM, which makes it faster and more efficient than HTTP.
 - B. HTTPS is more secure than HTTP because the protocol includes a "pass" safety inspector that protects users' information.*

- C. HTTPS operates on wide area networks (WANs), while HTTP is limited to personal area networks (PANs).
- D. HTTPS includes a secure connection for transferring files, while HTTP is limited to general internet usage.

LO: 1.2.3

Difficulty: Moderate

12. What tools developed in 1990 led to the birth of the World Wide Web, giving average people access to the internet?
- A. internet protocol address (IP address), hypertext transfer protocol (HTTP), and the uniform resource locator (URL)
 - B. domain name system (DNS), hypertext markup language (HTML), and the uniform resource locator (URL)
 - C. hypertext transfer protocol (HTTP), domain name system (DNS), and virtual private network (VPN)
 - D. hypertext transfer protocol (HTTP), hypertext markup language (HTML), and the uniform resource locator (URL)*

LO: 1.3.1

Difficulty: Easy

13. What should you do to search the internet for an exact word or phrase?
- A. Enclose the word or phrase in quotation marks.*
 - B. Use the tilde (~) symbol in front of the word or phrase.
 - C. Include “+” in front of the word or phrase.
 - D. Focus on base or root words, such as “run” instead of “running.”

LO: 1.3.2

Difficulty: Moderate

14. When conducting research on the internet, why is triangulation a good practice?
- A. Triangulation provides hyperlinks that help locate a wider variety of research sources.
 - B. Triangulation enables users to find peer-reviewed research sources that are free.
 - C. Triangulation helps verify the credibility of research sources.*
 - D. Triangulation narrows search results to the most relevant research sources.

LO: 1.3.3

Difficulty: Difficult

15. You have decided to use a web-based application in your small business. How will this benefit your operations?

- A. This will allow everyone in your office to share the application with the purchase of just one license.
- B. This will allow everyone in your office to install the program directly on their computers.
- C. This will allow your business to save money by avoiding subscription fees.
- D. This will allow you and your employees to collaborate seamlessly in real time.*

LO: 1.3.3

Difficulty: Difficult

16. Your company installed firewalls in its computer system. How will this improve your company's computer security?

- A. The firewall establishes encryption to decipher a computer system's information.
- B. The firewall establishes a link between an employee's personal computer and an organization's intranet.
- C. The firewall establishes two-factor authentication to access a computer system.
- D. The firewall establishes a barrier between a network that is secure and one that is not secure.*

LO: 1.4.1

Difficulty: Difficult

17. Multiple employees in your company received an email from the home office requesting sensitive information. The email appeared to be legitimate, but it was actually fake. What type of security threat was this email?

- A. malware
- B. phishing*
- C. triangulation
- D. encryption

LO: 1.4.2

Difficulty: Moderate

18. What are biometrics?

- A. an individual's unique physical markers, such as fingerprints, used to gain access to a computer system*
- B. small data files deposited on user hard disks from websites
- C. attempts to use an individual's personal data to hack into a computer system
- D. tools to rewrite readable computer information into a code that can only be deciphered by using a key to the code

LO: 1.4.3

Difficulty: Easy

19. Which of the following is a tip for creating a strong password?

- A. Use a combination of letters and numbers with at least six characters.
- B. Include complete words as part of the password.
- C. Use only lowercase letters.
- D. Include special symbols, such as an exclamation point, instead of letters or numbers.*

LO: 1.4.3

Difficulty: Easy

20. To protect the privacy of its employees, your company is removing personally identifiable information from the company's computer data. What process is the company using?

- A. phishing
- B. data masking*
- C. encryption
- D. data erasure

LO: 1.4.4

Difficulty: Moderate

True/False

21. True or false? Technology has changed all industries, including industries like farming that traditionally have been considered nontechnical.

Answer: True

LO: 1.1.3

Difficulty: Easy

22. True or false? The concept of a mobile phone is older than many people think, dating back to the 1920s.

Answer: False

Mobile phones actually date back to the early 1900s, and a patent for a wireless phone in Kentucky was issued in 1908.

LO: 1.1.4

Difficulty: Easy

23. True or false? The original purpose of social media was to connect friends and families, and this goal has been accomplished as more than 60 percent of the global population uses social media.

Answer: False

While it is true that social media sites originated to connect friends and family, only 40 percent, not 60 percent, of the global population uses social media.

LO: 1.3.3

Difficulty: Moderate

24. True or false? With the Internet of Things (IoT), it is possible to transfer information between any two entities, even my cell phone and my dishwasher.

Answer: True

LO: 1.3.5

Difficulty: Difficult

Identification

- A. Encryption
- B. Two-factor authentication
- C. Antivirus/antimalware software
- D. Cloud-based intranet

25. This prevents unauthorized attempts to gain access to a computer system.

Answer: C. Antivirus/antimalware software

LO: 1.3.4

Difficulty: Moderate

26. This requires two pieces of identification to access a computer system.

Answer: B. Two-factor authentication

LO: 1.3.4

Difficulty: Easy

27. This requires a username and password to access a private computer system.

Answer: D. Cloud-based intranet

LO: 1.3.4

Difficulty: Moderate

28. This requires a key to the code to decipher a computer system's information.

Answer: A. Encryption

LO: 1.3.4

Difficulty: Moderate

Fill in the Blank

29. Herman Hollerith relied on the punch card system to advance number calculations used for the _____.

Answer: 1880 U.S. census

LO: 1.1.1

Difficulty: Easy

30. _____ refers to computer programs that convert data into actions and processes.

Answer: Software

LO: 1.2.1

Difficulty: Easy

31. I want visitors to my website to be able to easily visit other websites that contain related information. The most efficient way to enable users to do this is by inserting _____ on my web pages.

Answer: hyperlinks

LO: 1.3.1

Difficulty: Difficult

32. To protect the security of a company's computer system, employees should use a(n) _____ to gain access to an organization's intranet when they are working off-site.

Answer: virtual private network (VPN)

LO: 1.3.4

Difficulty: Moderate

Short Answer Questions

33. Who was Grace Hopper and what was her contribution to computing?

Sample Answer: Grace Hopper was a mathematician and admiral in the U.S. Navy. She was one of the first women to earn a doctorate from Yale University, and she became a pioneer in the military and the field of computer science by working in a male-dominated field. She made computer coding easier to learn and write by creating a programming language based on the English language, using words instead of symbols. This programming language later became COBOL, which is still used today.

LO: 1.1.1

Difficulty: Easy

34. Why did the development of the microcomputer change the face of the computer industry?

Sample Answer: Before the microcomputer was developed, computers were heavy and expensive. Typically, only large corporations and research institutions had the resources needed to purchase and store computers, which cost \$3,200 in 1964 or almost \$30,000 in today's dollars. The microcomputer, which was marketed in 1971, was a personal computer. By the 1980s, its smaller size and less costly price tag made computers useful and affordable for smaller businesses and organizations, as well as individuals.

LO: 1.1.1

Difficulty: Easy

35. As a computer salesperson, you hope to convince Micah and Aliza, the owners of a family farm, that they can benefit by using computer technology in farming. What information will you share with Micah and Aliza to encourage them to purchase a computer?

Sample Answer: Even though farms have traditionally been regarded as nontechnical operations, computers can benefit farmers and help them succeed. For example, computers can monitor field conditions, providing information such as the moisture levels of soil. This helps farmers determine when they need to irrigate their fields, and computers can be used to control irrigation. Farmers also use computers for other activities, such as maintaining accounting and financial records and inventories of farm equipment and supplies.

LO: 1.1.3

Difficulty: Difficult

36. Describe a smart space work environment.

Sample Answer: In a smart space office, computers handle tasks, maintain records, and send reminders. For example, the lights throughout the building may automatically turn on when anyone enters a room and turn off when the last person leaves the room. When employees work with customers, they may input customer information into a computer system, which automatically generates and sends invoices as needed. If customers do not pay those invoices by the due dates, the system may automatically contact customers to remind them that their bill is due. Meetings and appointments may be tracked on a calendar, which sends reminders each morning of the schedule for that day. Employees may have the ability to share files, conduct videochats, and e-sign documents without ever leaving their desks. In smart space work environments, employees are connected via the internet, which makes work easier and more efficient.

LO: 1.1.4

Difficulty: Moderate

37. Your friend, Laticia, works as a writer and is concerned that her job may soon be replaced with artificial intelligence. What advice would you offer Laticia to help her prepare for a possible career change?

Sample Answer: Laticia should make a list of her technological skills and identify skills that she needs to develop or improve. Educational institutions offer certificates in a variety of skills like copywriting, data analytics, computer programming, and public speaking that may benefit Laticia. She also should contact her colleagues on sites such as LinkedIn to learn about career opportunities and let them know that she is interested in a new job. Laticia's colleagues who have made a career change, particularly other writers, may be able to offer recommendations, and she should consider hiring a job coach to provide guidance as she evaluates her options and makes this change.

LO: 1.1.5

Difficulty: Moderate

38. While conducting research for a work project, you encountered information that may not be valid and reliable. How can you verify the credibility of this information?

Sample Answer: I would analyze the research. My analysis would include learning about the author of the information, including their affiliation, expertise, and reputation. The date of the information is important to determine if the research is recent and relevant, and I want to know who paid for the research. I also will check the website's maintenance, including whether it is updated with functional hyperlinks. I will consider whether the research seems objective, as well as whether it includes information that is clearly biased and based on opinions. If possible, I may contact the author for more information. Finally, I'll use triangulation and find at least two additional research sources that are credible and confirm the research information.

LO: 1.3.3

Difficulty: Difficult

39. Your friend, Marcus, was recently hacked, and the hacker used some of his personal information to open new credit cards in Marcus's name. What advice would you give Marcus to help him safeguard his personal information and keep it private online?

Sample Answer: Marcus should change all of his passwords immediately, use unique passwords for each account, and routinely update his passwords. Marcus also should check the privacy settings of his social media sites and set them at a high level. He should limit the personal information that he shares online, particularly personal details such as his birth date and middle name. He should block access to his accounts for anyone who appears to be suspicious, and he should avoid clicking on links and advertisements from unfamiliar sources.

LO: 1.3.3

Difficulty: Easy

40. WorldCorp's computer system has been hacked, and your supervisor assigned you to a team tasked with improving WorldCorp's computer security. The company already uses tools such as encryption, firewalls, and password management. However, WorldCorp recently hired over a dozen new employees who may not be following the company's security protocols, and all of them work from home. How would you address this situation to make it less likely that WorldCorp will be hacked again?

Sample Answer: I would recommend company-wide training for all employees to help them understand network security issues and the importance of password management. This training would teach each employee about threats to computer security, such as phishing and malware. Employees also would review the principles of password management, including tips for creating strong passwords, such as using a combination of letters and numbers with a minimum of eight characters. I would recommend the company set up a process that requires employees to change their passwords periodically, such as every 30 days. I also would review the company's virtual private network security to ensure that the system is secure for employees who now work from home. Finally, I would suggest that WorldCorp incorporate the use of biometrics into its security protocols, requiring all employees to access the company's computer system with a retinal scan or fingerprint.

LO: 1.4.3

Difficulty: Moderate

This file is copyright 2023, Rice University. All Rights Reserved.