CompTIA A+

Core 1 (220-1001)
Core 2 (220-1002)

Practice Questions

DAVID L. PROWSE
CompTIA® A+
Practice Questions
Exam Cram
Core 1 (220-1001) and
Core 2 (220-1002)

David L. Prowse
Contents at a Glance

CHAPTER 1: Introduction to the 220-1001 Exam 1
CHAPTER 2: 220-1001 Practice Exam A 7
CHAPTER 3: 220-1001 Practice Exam B 43
CHAPTER 4: 220-1001 Practice Exam C 83
CHAPTER 5: Review of the Core (220-1001) 125
CHAPTER 6: Introduction to the 220-1002 Exam 131
CHAPTER 7: 220-1002 Practice Exam A 137
CHAPTER 8: 220-1002 Practice Exam B 173
CHAPTER 9: 220-1002 Practice Exam C 213
CHAPTER 10: Review of the Core (220-1002) 255
CHAPTER 11: Wrap-Up 259
# Table of Contents

**Introduction** ........................................................................................................... ix

**Chapter 1:**  
**Introduction to the 220-1001 Exam** ................................................................. 1  
Exam Breakdown ........................................................................................................ 1  
  Domain 1.0: Mobile Devices (14%) ................................................................. 2  
  Domain 2.0: Networking (20%) ........................................................................ 2  
  Domain 3.0: Hardware (27%) .......................................................................... 2  
  Domain 4.0: Virtualization and Cloud Computing (12%) ............................. 3  
  Domain 5.0: Hardware and Network Troubleshooting (27%) ...................... 3  
Test-Taking Tips ...................................................................................................... 4  
Getting Ready for the Practice Exams ................................................................. 5

**Chapter 2:**  
**220-1001 Practice Exam A** ............................................................................. 7  
  Practice Questions ............................................................................................... 7  
  Quick-Check Answer Key .................................................................................. 24  
  Answers and Explanations ................................................................................. 25

**Chapter 3:**  
**220-1001 Practice Exam B** ............................................................................. 43  
  Practice Questions ............................................................................................... 44  
  Quick-Check Answer Key .................................................................................. 61  
  Answers and Explanations ................................................................................. 62

**Chapter 4:**  
**220-1001 Practice Exam C** ............................................................................. 83  
  Practice Questions ............................................................................................... 83  
  Quick-Check Answer Key .................................................................................. 102  
  Answers and Explanations ................................................................................. 103
## Chapter 10:
**Review of the Core (220-1002)** ........................................ 255
- Review of the Domains .................................................. 255
- Review What You Know ................................................. 256
- More Test-Taking Tips .................................................... 257
- Taking the Real Exam .................................................... 257

## Chapter 11:
**Wrap-Up** ......................................................................... 259
- Getting Ready and the Exam Preparation Checklist .......... 259
- Tips for Taking the Real Exam ......................................... 263
  - General Practices for Taking Exams ......................... 264
  - Smart Methods for Difficult Questions ..................... 266
  - Wrapping Up the Exam ............................................... 267
- Beyond the CompTIA A+ Certification .......................... 267
About the Author

David L. Prowse is the author of more than a dozen computer training books and video products. He has worked in the computer field for 25 years and loves to share his experience through teaching and writing.

About the Technical Reviewer

Chris Crayton (MCSE) is an author, technical consultant, and trainer. He has worked as a computer technology and networking instructor, information security director, network administrator, network engineer, and PC specialist. Chris has authored several print and online books on PC repair, CompTIA A+, CompTIA Security+, and Microsoft Windows. He has also served as technical editor and content contributor on numerous technical titles for several of the leading publishing companies. He holds numerous industry certifications, has been recognized with many professional teaching awards, and has served as a state-level SkillsUSA competition judge.

Acknowledgments

I’d like to give special recognition to Paul Carlstroem, Chris Cleveland, Chris Crayton, and Mandie Frank. Without you, this book wouldn’t have made it to the presses. I’m serious here—writing a book is tough work, and this edition of the A+ Practice Questions Exam Cram was the toughest to date. Thank you.

Publishing a book takes a team of professional and talented people. My thanks to everyone at Pearson for your expertise and help throughout this project.
We Want to Hear from You!

As the reader of this book, you are our most important critic and commentator. We value your opinion and want to know what we’re doing right, what we could do better, what areas you’d like to see us publish in, and any other words of wisdom you’re willing to pass our way.

We welcome your comments. You can email or write to let us know what you did or didn’t like about this book—as well as what we can do to make our books better.

Please note that we cannot help you with technical problems related to the topic of this book.

When you write, please be sure to include this book’s title and author as well as your name and email address. We will carefully review your comments and share them with the author and editors who worked on the book.
What You Will Find in This Book

Introduction

Welcome to *CompTIA A+ Core 1 (220-1001) and Core 2 (220-1002) Practice Questions Exam Cram*. The sole purpose of this book is to provide you with practice questions that are complete with answers and explanations to help you learn, drill, and review for the CompTIA A+ certification exams. The book offers 480 questions that help you practice each exam domain and help you assess your knowledge before you take the real exams. The detailed answers to every question aid in reinforcing your knowledge about the concepts associated with the 1000 series of the CompTIA A+ exams.

Who This Book Is For

The CompTIA A+ exams are designed for individuals with at least 12 months of hands-on experience in the lab or field. If you have that experience, this book will be an excellent late-stage study tool. However, if you have not acquired that experience, I recommend that you register for a hands-on A+ course or, at the very least, purchase an A+ study guide such as the *CompTIA A+ Core 220-1001 and Core 220-1002 Exam Cram* textbook or consider my *A+ Complete Video Course*. After you take the course and/or read the study guide, return to this book as your late-stage test preparation to be used just before taking the real exams.
Welcome to the first 220-1001 practice exam. This is the easiest of the 220-1001 exams. The subsequent exams will get progressively harder.

Take this first exam slowly. The goal is to make sure you understand all of the concepts before moving on to the next test.

Write down your answers, and check them against the Quick-Check Answer Key, which immediately follows the exam. After the answer key, you will find the explanations for all of the answers. Good luck!

Practice Questions

1. Which of the following are components you might find inside a PC? (Select the three best answers.)
   - A. CPU
   - B. Motherboard
   - C. Keyboard
   - D. Printer
   - E. RAM
   - F. Cable modem

2. Which device stores data over the long term?
   - A. CPU
   - B. RAM
   - C. Hard drive
   - D. Video card
3. To which type of technology would you install a x16 card?
   - A. Thunderbolt
   - B. PCIe
   - C. USB
   - D. DisplayPort

4. Which process of the computer checks all your components during boot?
   - A. CMOS
   - B. POST
   - C. BIOS
   - D. Lithium battery

5. Tim installs a new CPU in a computer. After a few hours, the processor starts to overheat. Which of the following might be the cause?
   - A. The CPU is not locked down.
   - B. The CPU is not properly seated.
   - C. Thermal compound was not applied.
   - D. The CPU is not compatible with the motherboard.

6. Which of the following could cause the POST to fail? (Select the two best answers.)
   - A. CPU
   - B. Power supply
   - C. Optical drive
   - D. Memory
   - E. Hard drive

7. Which of the following might you find as part of a tablet computer? (Select the two best answers.)
   - A. Flash memory
   - B. SATA hard drive
   - C. Multi-touch touchscreen
   - D. 24-inch display
8. Which kind of socket incorporates “lands” to ensure connectivity to a CPU?
   • A. PGA
   • B. Chipset
   • C. LGA
   • D. Copper

9. How should you hold RAM when installing it?
   • A. By the edges
   • B. By the front and back
   • C. With tweezers
   • D. With a punchdown tool

10. You have been tasked with setting up a specialized computer for video editing. Which of the following should you include with the computer? (Select the two best answers.)
    • A. Gigabit NIC
    • B. Hypervisor
    • C. SSD
    • D. Docking station
    • E. Dual monitors
    • F. NAS

11. How many pins are inside an SATA 3.0 data connector?
    • A. 15
    • B. 7
    • C. 24
    • D. 127

12. What is the delay in the RAM’s response to a request from the memory controller called?
    • A. Latency
    • B. Standard deviation
    • C. Fetch interval
    • D. Lag
13. What is the minimum number of hard drives necessary to implement RAID 5?
   ☐ A. Two
   ☐ B. Five
   ☐ C. Three
   ☐ D. Four

14. A user’s time and date keep resetting to January 1, 2012. Which of the following is the most likely cause?
   ☐ A. The BIOS needs to be updated.
   ☐ B. Windows needs to be updated.
   ☐ C. The Windows Date and Time Properties window needs to be modified.
   ☐ D. The lithium battery needs to be replaced.

15. Which type of adapter card is normally plugged into a PCIe x16 adapter card slot?
   ☐ A. Modem
   ☐ B. Video
   ☐ C. NIC
   ☐ D. Sound

16. Which of the following is a common type of CPU for a smartphone?
   ☐ A. LGA 2011
   ☐ B. SoC
   ☐ C. Core i7
   ☐ D. LPDDR

17. Which of the following components could cause the POST to beep several times and fail during boot?
   ☐ A. Sound card
   ☐ B. Power supply
   ☐ C. Hard drive
   ☐ D. RAM
18. Which of the following are ports you might find on smartphones and tablets? (Select the two best answers.)

- A. eSATA
- B. USB-C
- C. Lightning
- D. DVI

Quick Answer: 24
Detailed Answer: 28

19. Which of the following has the fastest data throughput?

- A. CD-ROM
- B. Hard drive
- C. RAM
- D. USB

Quick Answer: 24
Detailed Answer: 28

20. Which of the following CPU cooling methods is the most common?

- A. Heat sink
- B. Heat sink and fan
- C. Liquid cooling
- D. Liquid nitrogen

Quick Answer: 24
Detailed Answer: 29

21. You are tasked with fixing a problem with a video editing workstation. There is an unexpected clicking noise every time the video editing program is started. The case fans have been replaced, but the noise remains. Diagnostics have also been run on the video card, and it appears to be operating normally. What action should you take first?

- A. Perform a System Restore.
- B. Replace the video card.
- C. Replace the hard drive.
- D. Perform a full data backup.
- E. Scan for malware.

Quick Answer: 24
Detailed Answer: 29

22. Which of the following is not a video port?

- A. DVI
- B. HDMI
- C. DisplayPort
- D. S/PDIF

Quick Answer: 24
Detailed Answer: 29
23. Which of the following is necessary for a CAD/CAM workstation? (Select the two best answers.)
   - A. SSD
   - B. HDMI output
   - C. Surround sound
   - D. High-end video

24. Which of the following technologies allows two mobile devices to transfer data simply by touching them together?
   - A. USB
   - B. NFC
   - C. Bluetooth
   - D. Wi-Fi

25. What type of power connector is used for a x16 video card?
   - A. Molex 4-pin
   - B. SATA 15-pin
   - C. PCIe 6-pin
   - D. P1 24-pin

26. Which of the following are output devices? (Select the three best answers.)
   - A. Speakers
   - B. Keyboard
   - C. Mouse
   - D. Printer
   - E. Display
   - F. Touchpad

27. What does the b in 1000 Mbps stand for?
   - A. Megabytes
   - B. Bits
   - C. Bytes
   - D. Bandwidth
28. When running cable through drop ceilings, which type of cable do you need?
   - A. PVC
   - B. Category 5
   - C. Strong cable
   - D. Plenum
   Quick Answer: 24
   Detailed Answer: 30

29. Which device connects multiple computers in a LAN?
   - A. Modem
   - B. Router
   - C. Switch
   - D. Firewall
   Quick Answer: 24
   Detailed Answer: 31

30. Which of the following is the default subnet mask for IP address 192.168.1.1?
   - A. 255.255.0.0
   - B. 255.255.255.0
   - C. 255.0.0.0
   - D. 255.255.255.255
   Quick Answer: 24
   Detailed Answer: 31

31. Which of the following is the minimum category cable needed for a 1000BASE-T network?
   - A. Category 3
   - B. Category 5
   - C. Category 5e
   - D. Category 6
   Quick Answer: 24
   Detailed Answer: 31

32. Which of the following IP addresses can be routed across the Internet?
   - A. 127.0.0.1
   - B. 192.168.1.1
   - C. 129.52.50.13
   - D. 10.52.50.13
   Quick Answer: 24
   Detailed Answer: 31

33. Which port number is used by HTTPS by default?
   - A. 21
   - B. 25
   - C. 80
   - D. 443
   Quick Answer: 24
   Detailed Answer: 31
34. Which of the following cable types have a copper medium? (Select the three best answers.)
- A. Twisted pair
- B. Coaxial
- C. Fiber optic
- D. Cat 7
- E. Multimode

35. Which of the following cable types can protect from electromagnetic interference (EMI)? (Select the two best answers.)
- A. UTP
- B. STP
- C. Fiber optic
- D. Cat 6

36. You are configuring Bob’s computer to access the Internet. Which of the following are required? (Select all that apply.)
- A. DNS server address
- B. Gateway address
- C. Email server name
- D. DHCP server address
- E. Domain name

37. Which of the following translates a computer name into an IP address?
- A. TCP
- B. UDP
- C. DNS
- D. FTP

38. A customer wants to access the Internet from many different locations in the United States. Which of the following is the best technology to enable the customer to do so?
- A. Infrared
- B. Cellular WAN
- C. Bluetooth
- D. 802.11ac
39. You just configured the IP address 192.168.0.105 in Windows. When you press the Tab key, Windows automatically configures the default subnet mask of 255.255.255.0. Which of the following IP addresses is a suitable gateway address?

- A. 192.168.1.100
- B. 192.168.1.1
- C. 192.168.10.1
- D. 192.168.0.1

40. A wireless network is referred to as which of the following?

- A. SSID
- B. WPA
- C. DMZ
- D. DHCP