

Experiencing MIS, 9e (Kroenke)
Chapter 6 The Cloud

1) Which of the following statements best defines the cloud?

- A) The cloud is the elastic leasing of pooled computer resources over the Internet.
- B) The cloud is a peer-to-peer network used to share data between users.
- C) The cloud is the elastic leasing of in-house computer hardware.
- D) The cloud is the network of servers hosted in-house by an organization for its own requirements.

Answer: A

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

2) In the context of the cloud, which of the following best describes the term elastic?

- A) It means that the computing resources leased can be increased or decreased dynamically in cloud-based hosting.
- B) It means that the operations staff manually allots fresh resources when the traffic increases.
- C) It means that the customers are provided a consistent bandwidth on the cloud.
- D) It means that the resources available for cloud-hosting are shared among customers.

Answer: A

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

3) An organization that hires cloud services _____.

- A) can accommodate an increase in traffic from only one city
- B) is allowed to change its computer hardware requirements only once in an hour
- C) can limit the response time of its Web pages by adding servers whenever needed
- D) is given access only to a single server

Answer: C

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

4) Which of the following is TRUE about accessing resources over the Internet?

- A) The resources are not stored locally on the company premise.
- B) Companies have to maintain servers onsite.
- C) Companies need multiple back generators in case of emergencies.
- D) Companies have to pay for personal to physically care for the servers.

Answer: A

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

5) Which of the following statements is TRUE of cloud-based hosting?

- A) It makes scaling up to meet the demands of increased traffic difficult.
- B) It involves the risk of investing in technology that may soon become obsolete.
- C) It gives greater control over physical location of data.
- D) It gives little visibility over the security being used to protect data.

Answer: D

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

6) Which of the following is an advantage of in-house hosting?

- A) It requires very small capital.
- B) It gives greater control over the location of data.
- C) It has the ability to adapt to growing or fluctuating demands.
- D) It eliminates the risk of obsolescence.

Answer: B

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

7) Which of the following factors has contributed to an increase in the popularity of cloud hosting?

- A) demand for services that can run without the support of the Internet
- B) development of virtualization technology that allows near-instantaneous creation of new virtual machines
- C) development of Web services that can be accessed without meeting the service-oriented architecture specifications
- D) increase in the cost of processors, data communication, and data storage

Answer: B

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

8) Cloud resources are pooled because many different organizations use the same physical hardware.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

9) Cloud vendors do not benefit from economies of scale.

Answer: FALSE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

10) Virtualization increases the scalability of an organization's systems because it can quickly respond to incremental growth in demand.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

11) As standard practice, customers are regularly updated by cloud vendors about the location and number of copies made of their data.

Answer: FALSE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

12) To use cloud-based hosting, an organization will have to construct its own data center.

Answer: FALSE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

13) Before the creation of personal computers, time-sharing vendors provided slices of computer time on a use-fee basis.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

14) Cloud-based hosting is preferred by organizations that are required by law to have physical control over their data.

Answer: FALSE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

15) Organizations that are required by law to have physical control over their data can benefit from cloud computing using private clouds and virtual private clouds.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

16) Why is the term *elastic* used to describe the cloud?

Answer: The term elastic means that the computing resources leased can be increased or decreased dynamically, programmatically, in a short span of time, and that organizations pay for just the resources that they use. If the traffic for a Web site hosted on the cloud increases, servers can be increased dynamically to restrict the response time of the Web site.

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

17) Why is the term *pooled* used to describe the cloud?

Answer: Cloud resources are pooled because many different organizations use the same physical hardware, which they share through virtualization. Cloud vendors dynamically allocate virtual machines to physical hardware as customer needs increase or decrease.

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

18) Why is cloud hosting preferred to in-house hosting?

Answer: Cloud hosting allows the number of servers being rented to be increased easily. This means any number of customers can access the Web site hosted on the cloud and have the same response time. Large, reputable organizations provide best-of-breed security and disaster recovery. Clients do not have to take the risk of investing in technology that may soon become obsolete; the cloud vendor takes that risk. For these reasons, cloud hosting is preferred to in-house hosting.

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

19) What are the disadvantages of cloud-based hosting?

Answer: The negatives of cloud computing involve loss of control. Users are dependent on a vendor; changes in the vendor's management, policy, and prices are beyond their control. Further, users don't know where their data, which may be a large part of their organization's value, is located. The users don't know how many copies of their data there are or even if they are located in the same country as they are. Finally, users have no visibility into the security and disaster preparedness that is actually in place. Their competitors could be stealing their data and they would not know it.

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

20) What are the factors that have made cloud-based hosting advantageous?

Answer: Three factors have made cloud-based hosting advantageous today. First, processors, data communication, and data storage are so cheap that they are nearly free. At the scale of a Web farm of hundreds of thousands of processors, providing a virtual machine for an hour costs essentially nothing. Data communication is so cheap that getting the data to and from that processor is also nearly free. Second, virtualization technology enables the near instantaneous creation of a new virtual machine. The customer provides (or creates in the cloud) a disk image of the data and programs of the machine it wants to provision. Virtualization software does the rest. Finally, Internet-based standards enable cloud-hosting vendors to provide processing capabilities in flexible, yet standardized, ways.

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

21) Explain why cloud-based hosting does not make sense for some organizations.

Answer: The only organizations for which cloud hosting may not make sense are those that are required by law or by industry standard practice to have physical control over their data. Such organizations might be forced to create and maintain their own hosting infrastructure. A financial institution, for example, might be legally required to maintain physical control over its data. Even in this circumstance, however, it is possible to gain many of the benefits of cloud computing using private clouds and virtual private clouds.

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

22) Phobas Inc. offers an online service that stores notes made by customers on the cloud. When a customer enters notes on a device, it gets updated in all the devices he/she owns. Which of the following cloud-based offerings does Phobas Inc. provide to its customers?

A) unified communications as a service (UCaaS)

B) platform as a service (PaaS)

C) software as a service (SaaS)

D) infrastructure as a service (IaaS)

Answer: C

AACSB: Reflective Thinking

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Application

23) An online service provider provides its users with hosted computers, an operating system, and a database management system (DBMS). This allows customers to add their own applications to the hosted services. Which of the following cloud-based offerings is being provided to the users?

- A) unified communications as a service (UCaaS)
- B) platform as a service (PaaS)
- C) infrastructure as a service (IaaS)
- D) software as a service (SaaS)

Answer: B

AACSB: Reflective Thinking

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Application

24) The cloud-based service that provides the hardware and allows customers to load an operating system of their choice is known as _____.

- A) application virtualization
- B) platform as a service (PaaS)
- C) infrastructure as a service (IaaS)
- D) network functions virtualization (NFV)

Answer: C

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

25) A _____ is an information system that stores user data in many different geographical locations and makes that data available on demand.

- A) virtual private network
- B) content delivery network
- C) wide area network
- D) local area network

Answer: B

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

26) Which of the following is an advantage of a content delivery network?

- A) It increases the load time of Web pages for the users.
- B) It provides protection from denial-of-service (DOS) attacks.
- C) It increases the reliability by storing the data on a single, large server.
- D) It increases the load on the original server.

Answer: B

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

27) Which of the following statements is TRUE of content delivery networks (CDNs)?

- A) They reduce access costs by delivering data faster.
- B) They distribute data on different servers without any data replication.
- C) They use geographic proximity as the factor to decide which server should deliver a requested content.
- D) They use predetermined servers to deliver content to each location irrespective of traffic changes.

Answer: A

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

28) An internal information system built using Web services is said to be using the cloud if it _____.

- A) allocates specific servers to each task
- B) offers elasticity in the usage of servers
- C) uses the Intranet
- D) provides platform as a service (PaaS)

Answer: B

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

29) Which of the following is a reason for an internal information system that uses Web services to not be considered a cloud?

- A) The number of servers is fixed and is not made elastic.
- B) Idle servers are dynamically reallocated.
- C) Data transfer is enabled without dependency on the Internet.
- D) Web service standards are not followed, as they are confined within the limits of a company.

Answer: A

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

30) Organizations can dynamically reuse servers that use Web services internally by _____.

- A) creating a private cloud
- B) replicating the servers
- C) allocating different servers for different services
- D) making the servers elastic

Answer: A

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

31) To use software as a service (SaaS), a user has to just sign up for the service and learn how to use it.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

32) A content delivery network (CDN) provides a specialized type of platform as a service (PaaS).

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

33) A content delivery network (CDN) services a user's request using the geographically closest server.

Answer: FALSE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

34) Content delivery networks (CDNs) increase a Web page's load time.

Answer: FALSE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

35) A routing server determines which content delivery network (CDN) server should respond to a request in real time.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

36) Content delivery networks (CDNs) are used to store and deliver content that rarely changes.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

37) A user can receive various pieces of a Web page from different servers on a content delivery network (CDN).

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

38) An elastic load balancer is a feature available in a private cloud that is not available in internal information systems, built using Web services.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

39) An organization's internal information system that does not provide elasticity is still considered a cloud.

Answer: FALSE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

40) Explain how software as a service (SaaS) works.

Answer: Software as a service (SaaS) is a category of cloud-based service offering. An organization that provides SaaS provides not only hardware infrastructure, but also an operating system and application programs as well. Apple's iCloud is an example of SaaS. Apple uses it to sync all of its customers' iOS devices. When a customer enters an appointment in her iPhone, Apple automatically pushes that appointment into the calendars on all of that customer's iOS devices. Further, customers can share calendars with others that will be synchronized as well.

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

41) Explain with an example how platform as a service (PaaS) works.

Answer: Platform as a service (PaaS) is a category of cloud hosting in which vendors provide hosted computers, an operating system, and possibly a database management system (DBMS). Microsoft Windows Azure, for example, provides servers installed with Windows Server. Customers of Windows Azure then add their own applications on top of the hosted platform.

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

42) Explain how a content delivery network ensures fast delivery of data on demand.

Answer: A content delivery network (CDN) is a system of hardware and software that stores user data in many different geographical locations and makes that data available on demand. An organization can use CDN to store copies of its Web pages or other information. The CDN vendor replicates this information on servers, possibly worldwide, so as to minimize latency. When a user demands this information, a routing server determines which CDN server is likely to service a request the fastest. As the traffic changes rapidly, especially for popular sites, such calculations are made in real-time. A request for content at one moment in time could be served by a computer in, say, San Diego, and a few moments later, that same request from that same user might be served by a computer in Salt Lake City.

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

43) What are the advantages of building an internal information system using Web services?

Answer: Organizations can use Web services to build internal information systems that can be accessed by multiple applications. By doing so, internal applications can use these Web services like building blocks. They can use the services that they need—and no more. As the Web services are encapsulated, the system can be altered without affecting other applications. In this way, systems development is more flexible, and it will be faster and hence less costly.

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

44) Sireus Corp. has availed a cloud-based service. As this service provides hardware and operating systems, Sireus Corp. can easily install its software on this cloud product. Which of the following services has the company availed from its cloud vendor?

A) unified communications as a service (UCaaS)

B) infrastructure as a service (IaaS)

C) platform as a service (PaaS)

D) software as a service (SaaS)

Answer: C

AACSB: Reflective Thinking

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.3: How Can eHermes Use the Cloud?

Classification: Application

45) If an organization opts for software as a service (SaaS), it will have to _____.

- A) install an operating system on the server
- B) purchase licenses for software replication
- C) transfer data and develop procedures
- D) install a database management system

Answer: C

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.3: How Can eHermes Use the Cloud?

Classification: Concept

46) A vendor providing software as a service (SaaS) usually makes the software available as a thin-client.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.3: How Can eHermes Use the Cloud?

Classification: Concept

47) If software licensed from others is to be installed on the cloud, licenses that permit replication must be purchased.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.3: How Can eHermes Use the Cloud?

Classification: Concept

48) Database management system (DBMS) products are included in infrastructure as a service (IaaS).

Answer: FALSE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.3: How Can eHermes Use the Cloud?

Classification: Concept

49) A small company is likely to choose infrastructure as a service (IaaS) as it does not require much technical expertise to load operating systems on a server.

Answer: FALSE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.3: How Can eHermes Use the Cloud?

Classification: Concept

50) What is a virtual private network?

- A) It is a markup language that fixes several HyperText Markup Language (HTML) deficiencies and is commonly used for program-to-program interaction over the Web.
- B) It is an add-on to browsers that was developed by Adobe and is useful for providing animation, movies, and other advanced graphics inside a browser.
- C) It is the most common language for defining the structure and layout of Web pages.
- D) It is a connection that uses the Internet to create secure point-to-point connections.

Answer: D

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Compare and contrast different ways of connecting to the Internet.

Learning Obj: LO 6.4: How Can Organizations Use Cloud Services Securely?

Classification: Concept

51) Which of the following is TRUE of a virtual private network (VPN)?

- A) It provides a secure connection for information transmitted over the public Internet.
- B) It does not encrypt messages.
- C) It is limited to organizational use.
- D) It can be used to store highly sensitive information of an organization.

Answer: A

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Compare and contrast different ways of connecting to the Internet.

Learning Obj: LO 6.4: How Can Organizations Use Cloud Services Securely?

Classification: Concept

52) Which of the following is an advantage of a virtual private network (VPN)?

- A) It can be used to physically connect a client and the server.
- B) It helps to securely access information over the public Internet.
- C) It facilitates easy access to an organization's data without requiring security access.
- D) It does not depend on the Internet to function effectively.

Answer: B

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.4: How Can Organizations Use Cloud Services Securely?

Classification: Concept

53) Which of the following statements is TRUE of private clouds?

- A) Private clouds are easy to build and operate.
- B) Several organizations pool their resources to form a private cloud.
- C) Private clouds provide access from outside an organization that it created without requiring a person to connect to a virtual private network.
- D) Idle servers in a private cloud cannot be repurposed for use by other organizations.

Answer: D

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.4: How Can Organizations Use Cloud Services Securely?

Classification: Concept

54) Which of the following is an advantage of a private cloud in an organization?

- A) It reduces the complexity involved in using other publicly available cloud services.
- B) It eliminates the need to use an additional secure network to access this cloud from outside the organization.
- C) It allows the organization to repurpose its idle servers for use to other organizations.
- D) It allows the organization to manage its servers with elastic load balancing.

Answer: D

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.4: How Can Organizations Use Cloud Services Securely?

Classification: Concept

55) Which of the following statements is TRUE of a virtual private cloud (VPC)?

- A) A VPC does not make use of a virtual private network.
- B) A VPC generally stores an organization's most sensitive data.
- C) A VPC can be accessed only from within an organization.
- D) A VPC can be built on a public cloud infrastructure.

Answer: D

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.4: How Can Organizations Use Cloud Services Securely?

Classification: Concept

56) Which of the following is a difference between a virtual private network (VPN) and a virtual private cloud (VPC)?

- A) A VPC uses encrypted connections between the users and its server, while a VPN does not use such secure connections.
- B) A VPC can be accessed over the Internet, while a VPN cannot be accessed over the Internet.
- C) A VPC does not facilitate data storage, while a VPN allows the storage of a user's most important data.
- D) A VPC provides the advantages of cloud storage, but a VPN by itself cannot provide these advantages.

Answer: D

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.4: How Can Organizations Use Cloud Services Securely?

Classification: Concept

57) Which of the following is an advantage of using a private cloud over a virtual private cloud (VPC)?

- A) Unlike a VPC, the infrastructure required for a private cloud can be built and operated easily.
- B) Unlike a VPC, a private cloud can be created and used without the Internet.
- C) Unlike a VPC, a private cloud can be built on top of a public cloud infrastructure.
- D) Unlike a VPC, a private cloud does not require permission from regulating bodies to host sensitive data.

Answer: D

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.4: How Can Organizations Use Cloud Services Securely?

Classification: Concept

58) A tunnel is a virtual, private pathway over a public or shared network from the virtual private network (VPN) client to the VPN server.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the major types of computer hardware and software used by companies.

Learning Obj: LO 6.4: How Can Organizations Use Cloud Services Securely?

Classification: Concept

59) A virtual private network uses the Internet to create the appearance of private, secure connections.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.4: How Can Organizations Use Cloud Services Securely?

Classification: Concept

60) A virtual private network (VPN) uses encryption and decryption to protect VPN communications from snooping.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.4: How Can Organizations Use Cloud Services Securely?

Classification: Concept

61) A virtual private cloud allows organizations to gain the advantages of cloud storage for the portion of data that need not be physically controlled.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.4: How Can Organizations Use Cloud Services Securely?

Classification: Concept

62) Explain how a user in a hotel in Los Angeles can connect to a local area network (LAN) at a Michigan site using a virtual private network.

Answer: A virtual private network (VPN) uses the Internet to create the appearance of private, secure connections. The remote user is the VPN client. That client first establishes a public connection to the Internet. The connection can be obtained by accessing a local ISP or by using a direct Internet connection. Once the Internet connection is made, VPN software on the remote user's computer establishes a connection with the VPN server in Michigan. The VPN client and VPN server then have a secure connection.

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.4: How Can Organizations Use Cloud Services Securely?

Classification: Concept

63) How are communications secured from snooping in a virtual private network?

Answer: In order to secure virtual private network (VPN) communications over the public Internet, the VPN client software encrypts, or codes, messages so their contents are protected from snooping. Then, the VPN client appends the Internet address of the VPN server to the message and sends that package over the Internet to the VPN server. When the VPN server receives the message, it strips its address off the front of the message, decrypts the coded message, and sends the plain text message to the original address inside the LAN. In this way, secure private messages are delivered over the public Internet.

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.4: How Can Organizations Use Cloud Services Securely?

Classification: Concept

64) What is a private cloud? What are its limitations?

Answer: A private cloud is a cloud that is owned and operated by an organization for its own benefit. Private clouds provide the advantages of elasticity, but to a questionable benefit.

Organizations cannot repurpose their idle servers for use by other companies. Even a large conglomerate or major international company that uses the idle servers to balance processing loads across subsidiary business units and across different geographical regions is unlikely to save money or time. It is unimaginable that any noncloud company could build and operate a cloud service facility that competes with those provided by the existing large cloud vendors. Also, most organizations choose not to replicate database servers because of the complexity of managing multiple database servers.

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.4: How Can Organizations Use Cloud Services Securely?

Classification: Concept

65) What is a virtual private cloud? What are its advantages?

Answer: A virtual private cloud (VPC) is a subset of a public cloud that has highly restricted, secure access. An organization can build its own VPC on top of public cloud infrastructure.

Using a VPC, an organization can store its most sensitive data on its own infrastructure, and store the less sensitive data on the VPC. In this way, organizations that are required to have physical control over some of their data can place that data on their own servers and locate the rest of their data on the VPC. This is a feature that is not available in a private cloud.

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.4: How Can Organizations Use Cloud Services Securely?

Classification: Concept

66) Which of the following is likely to be a consequence of cloud computing in the future?

A) The preference to set up one's own computing infrastructure will increase among organizations.

B) The cost of obtaining elastic resources will decrease.

C) The demand for employees who know how to use and manage information systems will reduce.

D) The number of technology-based startups will stagnate.

Answer: B

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.5: What Does the Cloud Mean for Your Future?

Classification: Concept

67) A(n) _____ is an information system (IS) that provides computer-based activity at a distance.

- A) transport driver interface
- B) content delivery network
- C) indexing service system
- D) remote action system

Answer: D

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Compare and contrast different ways of connecting to the Internet.

Learning Obj: LO 6.5: What Does the Cloud Mean for Your Future?

Classification: Concept

68) A remote system designed by Alpha Solutions uses cameras and motion-sensing equipment to issue tickets for traffic violations. This system is an example of _____.

- A) telediagnosis
- B) teleassessment
- C) telelaw enforcement
- D) teleinstruction

Answer: C

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.5: What Does the Cloud Mean for Your Future?

Classification: Concept

69) Large Web farms are likely to replace in-house servers used by small companies due to the benefits of cloud computing.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.5: What Does the Cloud Mean for Your Future?

Classification: Concept

70) Cloud computing can enable organizations to readily obtain elastic resources at very low costs.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.5: What Does the Cloud Mean for Your Future?

Classification: Concept

71) Cloud computing is likely to lead to an increase in the number of technology-based startups.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.5: What Does the Cloud Mean for Your Future?

Classification: Concept

72) Telediagnosis uses telecommunications to link surgeons to robotic equipment at distant locations.

Answer: FALSE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.5: What Does the Cloud Mean for Your Future?

Classification: Concept

73) Teleaction increases the value of local mediocrity.

Answer: FALSE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.5: What Does the Cloud Mean for Your Future?

Classification: Concept

74) Remote action systems increase time and travel expenses.

Answer: FALSE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.5: What Does the Cloud Mean for Your Future?

Classification: Concept

75) Until about the late 1980s, organizations primarily used _____ for their internal data processing needs?

A) client-servers

B) the cloud

C) mainframes

D) scalable computers

Answer: C

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

76) Cloud computing architecture allows employees to use devices connected with IoT.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

77) Benefits of using the cloud include all of the following EXCEPT _____.

A) elastic

B) pooled computer resources

C) used over the internet

D) use of dumb terminals

Answer: D

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

78) A company decides to run advertising during the NCAA Final Four tournament. They are not sure how traffic their website will get so they decide to lease what they think they need and can easily add more if necessary. This is called _____.

A) resource elasticity

B) pooled resources

C) client-server architecture

D) mainframe usage

Answer: A

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

79) Cloud vendors benefit from _____ because the average cost of production decreases as the size of the operation increases.

A) the Internet

B) using their own computers

C) economies of scale

D) using Apple's web farm

Answer: C

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

80) Software as a system is a fundamental cloud type.

Answer: FALSE

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

81) All of the following are examples of SaaS EXCEPT _____.

A) Google Mail

B) Office 365

C) Salesforce.com

D) Outlook on the PC

Answer: D

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.3: How Can eHermes Use the Cloud?

Classification: Concept

82) Amazon Redshift offers _____.

A) a relational database service

B) NoSQL database service

C) petabyte-scale data warehouse

D) MySQL database

Answer: C

AACSB: Information Technology

Difficulty: 3: Challenging

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.3: How Can eHermes Use the Cloud?

Classification: Concept

83) Cloud security is 100% security proof.

Answer: FALSE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.4: How Can Organizations Use Cloud Services Securely?

Classification: Concept

84) Using a VPC, an organization can store its _____.

- A) private documents
- B) most sensitive data
- C) public documents
- D) all documents

Answer: C

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.4: How Can Organizations Use Cloud Services Securely?

Classification: Concept

85) In the future, there may be additional cloud services that go beyond IaaS, SaaS, and PaaS.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Compare and contrast different ways of connecting to the Internet.

Learning Obj: LO 6.5: What Does the Cloud Mean for Your Future?

Classification: Concept

86) Thin clients are sometimes called _____.

- A) client-servers
- B) the cloud
- C) computer terminals
- D) scalable computers

Answer: C

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

87) The cloud was named as such because it was a cloudy outside on the day it was invented.

Answer: FALSE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.1: Why Is the Cloud the Future for Most Organizations?

Classification: Concept

88) Prior to the cloud, interorganizational processing was a long, slow, and expensive process.

Answer: TRUE

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

89) Strictly speaking, using Web services internally is not using the cloud because _____.

- A) internal web services do not provide elasticity
- B) internal web services use pooled resources
- C) internal web services use infrastructure as a service
- D) internal web services only using Microsoft Windows Azure

Answer: A

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.2: How Do Organizations Use the Cloud?

Classification: Concept

90) When leasing EC2, Amazon preinstalls either _____ or Windows Server on the cloud hardware.

- A) iOS
- B) Office 365
- C) Salesforce.com
- D) Linux

Answer: D

AACSB: Information Technology

Difficulty: 2: Moderate

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.3: How Can eHermes Use the Cloud?

Classification: Concept

91) What are the advantages and limitations of private clouds within smaller organizations?

Answer: What can organizations do with their idle servers? They could realize some cost savings by shutting down idle servers. But unlike cloud vendors, they cannot repurpose them for use by other companies. Possibly a large conglomerate or major international company could balance processing loads across subsidiary business units and across different geographical regions. 3M, for example, might balance processing for its different product groups and on different continents, but it is difficult to imagine that, in doing so, it would save money or time. A company like eHermes is very unlikely to develop a private cloud.

AACSB: Information Technology

Difficulty: 3: Challenging

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.4: How Can Organizations Use Cloud Services Securely?

Classification: Concept

92) Google Fiber plans on offering Internet connections that are 100 times faster than the average broadband connection.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.5: What Does the Cloud Mean for Your Future?

Classification: Concept

93) Which of the following is a negative aspect of the cloud?

A) The overall size of the cloud is getting bigger.

B) There will be faster Internet connections.

C) Large web farms will require fewer employees.

D) Organizations will readily obtain elastic resource at a low cost.

Answer: C

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.5: What Does the Cloud Mean for Your Future?

Classification: Concept

94) In the future, service providers may provide _____ to help companies evaluate the mountains of big data the companies they are collecting.

A) Infrastructure as a Service (IaaS)

B) Analytics as a Service (AaaS)

C) Platform as a Service (PaaS)

D) Software as a Service (SaaS)

Answer: B

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.5: What Does the Cloud Mean for Your Future?

Classification: Concept

95) United Healthcare treats video-based doctor visits the same as regular doctor visits.

Answer: TRUE

AACSB: Information Technology

Difficulty: 1: Easy

Course LO: Describe the components of an information system (IS).

Learning Obj: LO 6.5: What Does the Cloud Mean for Your Future?

Classification: Concept