***Experiencing MIS, 9e* (Kroenke)**
Chapter 3 Business Intelligence Systems

1) _____ process operational, social, and other data to identify patterns, relationships, and trends for by business professionals and other knowledge workers.
A) Virtualization techniques
B) Live migration techniques
C) Business intelligence systems
D) Windowing systems
Answer: C
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.1: How Do Organizations Use Business Intelligence (BI) Systems?
Classification: Concept

2) Which of the following statements is TRUE of business intelligence (BI) systems?
A) Business intelligence systems are primarily used for developing software systems and data mining applications.
B) The four standard components of business intelligence systems are software, procedures, applications, and programs.
C) The software component of a business intelligence system is called an intelligence database.
D) Business intelligence systems can be used for informing.
Answer: D
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.1: How Do Organizations Use Business Intelligence (BI) Systems?
Classification: Concept

3) The patterns, relationships, trends, and predictions identified by BI systems are called business intelligence.
Answer: TRUE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.1: How Do Organizations Use Business Intelligence (BI) Systems?
Classification: Concept

4) As information systems, BI systems have three standard components.
Answer: FALSE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.1: How Do Organizations Use Business Intelligence (BI) Systems?
Classification: Concept

5) The data that an organization purchases from data vendors can act as the source data for a business intelligence system.
Answer: TRUE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.1: How Do Organizations Use Business Intelligence (BI) Systems?
Classification: Concept

6) Project management is one of the few domains in which business intelligence is rarely used.
Answer: FALSE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.1: How Do Organizations Use Business Intelligence (BI) Systems?
Classification: Concept

7) Problem solving requires project management.
Answer: FALSE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.1: How Do Organizations Use Business Intelligence (BI) Systems?
Classification: Concept

8) When using a business intelligence (BI) system, the manager must have a specific purpose for reviewing the data.
Answer: FALSE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.1: How Do Organizations Use Business Intelligence (BI) Systems?
Classification: Concept

9) The purchasing patterns of an individual never changes.
Answer: FALSE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.1: How Do Organizations Use Business Intelligence (BI) Systems?
Classification: Concept

10) What are business intelligence systems?
Answer: Business intelligence (BI) systems are information systems that process operational, social, and other data to identify patterns, relationships, and trends for use by business professionals and other knowledge workers. These patterns, relationships, trends, and predictions are referred to as business intelligence. As information systems, BI systems have the five standard components: hardware, software, data, procedures, and people. The software component of a BI system is called a BI application.
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.1: How Do Organizations Use Business Intelligence (BI) Systems?
Classification: Concept

11) How does business intelligence help marketers identify changes in the purchasing patterns of customers?
Answer: Retailers know that important life events cause customers to change what they buy and, for a short interval, to form new loyalties to new store brands. Before the advent of BI, stores would watch the local newspapers for graduation, marriage, and baby announcements and send ads in response, which is a slow, labor-intensive, and expensive process. However, by applying business intelligence techniques to their sales data, companies can identify the purchasing pattern for different products, and by observing this purchasing pattern, companies can send ads for related products to those customers.
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.1: How Do Organizations Use Business Intelligence (BI) Systems?
Classification: Concept

12) _____ is the process of obtaining, cleaning, organizing, relating, and cataloging source data.
A) Data manipulation
B) BI analysis
C) Publish results
D) Data acquisition
Answer: D
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.2: What Are the Three Primary Activities in the BI Process?
Classification: Concept

13) Which of the following is a fundamental category of business intelligence (BI) analysis?
A) data acquisition
B) reporting
C) push publishing
D) pull publishing
Answer: B
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.2: What Are the Three Primary Activities in the BI Process?
Classification: Concept

14) Which of the following activities in the business intelligence process involves delivering business intelligence to the knowledge workers who need it?
A) data acquisition
B) BI analysis
C) publish results
D) data mining
Answer: C
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.2: What Are the Three Primary Activities in the BI Process?
Classification: Concept

15) _____ is the process of delivering business intelligence to users without any request from the users.
A) Push publishing
B) Pull publishing
C) Data acquisition
D) Data mining
Answer: A
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.2: What Are the Three Primary Activities in the BI Process?
Classification: Concept

16) _____ requires users to request business intelligence results.
A) Push publishing
B) Pull publishing
C) Data acquisition
D) Data mining
Answer: B
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.2: What Are the Three Primary Activities in the BI Process?
Classification: Concept

17) BI analysis is the process of obtaining, cleaning, organizing, relating, and cataloging source data.
Answer: FALSE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.2: What Are the Three Primary Activities in the BI Process?
Classification: Concept

18) The three fundamental categories of BI analysis are reporting, data mining, and BigData.
Answer: TRUE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.2: What Are the Three Primary Activities in the BI Process?
Classification: Concept

19) Push publishing requires a user to request BI results.
Answer: FALSE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.2: What Are the Three Primary Activities in the BI Process?
Classification: Concept

20) What are the three fundamental activities in the business intelligence analysis process?
Answer: The three primary activities in the business intelligence process include: reporting, data mining, and Big Data.
Data acquisition is the process of obtaining, cleaning, organizing, relating, and cataloging source data. Business intelligence analysis is the process of creating business intelligence and includes three fundamental categories: reporting, data mining, and BigData. Publish results is the process of delivering business intelligence to the knowledge workers who need it.
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 9.2: How Do SMIS Advance Organizational Strategy?
Classification: Concept

21) Differentiate between push publishing and pull publishing.
Answer: Push publishing delivers business intelligence to users without any request from the users; the BI results are delivered according to a schedule or as a result of an event or particular data condition. Pull publishing requires the user to request BI results.
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.2: What Are the Three Primary Activities in the BI Process?
Classification: Concept

22) The use of an organization's operational data as the source data for a business intelligence system is not usually recommended because it _____.
A) is not possible to create reports based on operational data
B) is not possible to perform business intelligence analyses on operational data
C) requires considerable processing and can drastically reduce system performance
D) considers only the external data and not the internal data regarding the organization's functions
Answer: C
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

23) A _____ is a facility for managing an organization's business intelligence data.
A) datasheet
B) dataspace
C) data warehouse
D) data table
Answer: C
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

24) The source, format, assumptions and constraints, and other facts concerning certain data are called _____.
A) metadata
B) data structures
C) microdata
D) network packets
Answer: A
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

25) Problematic data are termed _____.
A) random data
B) macro data
C) vague data
D) dirty data
Answer: D
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

26) Which of the following problems is particularly common for data that have been gathered over time?
A) wrong granularity
B) lack of integration
C) lack of consistency
D) missing values
Answer: C
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

27) _____ refers to the level of detail represented by data.
A) Abstraction
B) Granularity
C) Dimensionality
D) Aggregation
Answer: B
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

28) Which of the following statements is TRUE of data with granularity?
A) It can be too fine or too coarse and also have wrong granularity.
B) If granularity is too coarse, data can be made finer by summing and combining.
C) It is not possible to have a wrong granularity for a data.
D) If granularity is too coarse, data can be separated into constituent parts using regression.
Answer: A
AACSB: Information Technology
Difficulty: 2: Moderate
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

29) The more attributes there are in a sample data, the easier it is to build a model that fits the sample data, but that is worthless as a predictor. Which of the following best explains this phenomenon?
A) the free rider problem
B) the curse of dimensionality
C) the tragedy of the commons
D) the zero-sum game
Answer: B
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

30) A _____ is a data collection, smaller than the data warehouse that addresses the needs of a particular department or functional area of a business.
A) data mart
B) data room
C) datasheet
D) dataspace
Answer: A
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

31) A _____ is designed to extract data from operational systems and other sources, clean the data, and store and catalog that data for processing by business intelligence tools.
A) data mart
B) data center
C) data room
D) data warehouse
Answer: D
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

32) Users in a data mart obtain data that pertain to a particular business function from a _____.
A) data room
B) data center
C) datasheet
D) data warehouse
Answer: D
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

33) Which of the following statements is TRUE of a data warehouse?
A) A data warehouse is larger than a data mart.
B) A data warehouse functions like a retail store in a supply chain.
C) Users in a data warehouse obtain data pertaining to a business function from a data mart.
D) Data analysts who work with a data warehouse are experts in a particular business function.
Answer: A
AACSB: Information Technology
Difficulty: 2: Moderate
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

34) Placing business intelligence (BI) applications on operational servers can dramatically reduce system performance.
Answer: TRUE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

35) A data warehouse is a facility for managing an organization's business intelligence data.
Answer: TRUE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

36) External data purchased from outside resources are not included in data warehouses.
Answer: FALSE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

37) Data inconsistencies can occur from the nature of a business activity.
Answer: TRUE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

38) Data granularity refers to the amount of data represented by data.
Answer: FALSE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

39) The granularity in clickstream data is too coarse.
Answer: FALSE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

40) If the granularity of certain data is too coarse, the data can be separated into constituent parts using statistical techniques.
Answer: FALSE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

41) The curse of dimensionality states that the more attributes there are, the more difficult it is to build a model that fits the sample data.
Answer: FALSE
AACSB: Information Technology
Difficulty: 2: Moderate
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

42) Data marts are data collections that address the needs of a particular department or functional area of a business.
Answer: TRUE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

43) Data marts are usually larger than data warehouses.
Answer: FALSE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

44) Data analysts who work with data warehouses are experts at data management, data cleaning, data transformation, and data relationships.
Answer: TRUE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

45) Users in a data mart obtain data that pertain to a particular business function from a data warehouse.
Answer: TRUE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

46) An advantage of data warehouses is the low cost required to create, staff, and operate them.
Answer: FALSE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

47) Explain the functions of a data warehouse.
Answer: The functions of a data warehouse are to:
1. Obtain data
2. Cleanse data
3. Organize and relate data
4. Catalog data

Programs read operational and other data and extract, clean, and prepare that data for business intelligence processing. The prepared data are stored in a data warehouse database using a data warehouse DBMS, which can be different from an organization's operational DBMS. Data warehouses include data that are purchased from outside sources. Metadata concerning the data–its source, its format, its assumptions and constraints, and other facts about the data–are kept in a data warehouse metadata database. The data warehouse DBMS extracts and provides data to BI applications.
AACSB: Information Technology
Difficulty: 2: Moderate
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

48) What is data granularity?
Answer: Data granularity refers to the level of detail represented by data. Granularity can be too fine or too coarse. In general, it is better to have too fine a granularity than too coarse. If the granularity is too fine, the data can be made coarser by summing and combining. If the granularity is too coarse, however, there is no way to separate the data into constituent parts.
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

49) What is clickstream data?
Answer: Clickstream data is the data that is captured from customers' clicking behavior. For instance, how many clicks does a website receive per month? Because of the large amounts of data collected through clickstream data, statistical sampling is often recommended.
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

50) Explain the curse of dimensionality.
Answer: The curse of dimensionality is associated with the problem of data having too many attributes. For example, if internal customer data is combined with customer data that has been purchased, there will be more than one hundred different attributes to consider. It is hard to select only a few attributes from those available. The curse of dimensionality states that the more attributes there are, the easier it is to build a model that fits the sample data, but that is worthless as a predictor.
AACSB: Information Technology
Difficulty: 2: Moderate
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

51) What are the functions of a data warehouse?
Answer: A data warehouse takes data from data manufacturers (operational systems and other sources), cleans and processes the data, and locates the data on the shelves of the data warehouse. Data analysts who work with a data warehouse are experts at data management, data cleaning, data transformation, data relationships, and the like. However, they are not usually experts in a given business function. The data warehouse then distributes the data to data marts.
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

52) How is a data warehouse different from a data mart?
Answer: A data warehouse can be compared to a distributor in a supply chain. The data warehouse takes data from the data manufacturers (operational systems and other sources), cleans and processes the data, and locates the data on the shelves of the data warehouse. The data analysts who work with a data warehouse are experts at data management, data cleaning, data transformation, data relationships, and the like. The data warehouse then distributes the data to data marts.
A data mart is a data collection, smaller than the data warehouse that addresses the needs of a particular department or functional area of the business. If a data warehouse is the distributor in a supply chain, then a data mart is like a retail store in a supply chain. Users in a data mart obtain data that pertain to a particular business function from a data warehouse. Such users do not have the data management expertise that data warehouse employees have, but they are knowledgeable analysts for a given business function.
AACSB: Information Technology
Difficulty: 2: Moderate
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

53) _____ is the process of sorting, grouping, summing, filtering, and formatting structured data.
A) Push publishing
B) Publish results
C) Cloud computing
D) Reporting analysis
Answer: D
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

54) Which of the following refers to data in the form of rows and columns?
A) granulated data
B) structured data
C) micro data
D) coarse data
Answer: B
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

55) The goal of _____, a type of business intelligence analysis, is to create information about past performance.
A) push publishing
B) data mining
C) reporting analyses
D) BigData
Answer: C
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

56) _____ are reports produced when something out of predefined bounds occurs.
A) Exception reports
B) Static reports
C) Dynamic reports
D) Subscription reports
Answer: A
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

57) _____ is the application of statistical techniques to find patterns and relationships among data for classification and prediction.
A) Data encryption
B) Data warehousing
C) Data mining
D) Data decryption
Answer: C
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

58) _____ techniques emerged from the combined discipline of statistics, mathematics, artificial intelligence, and machine-learning.
A) Push publishing
B) Pull publishing
C) Data mining
D) Exception reporting
Answer: C
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

59) Which of the following statements is TRUE of unsupervised data mining?
A) Analysts apply unsupervised data mining techniques to estimate the parameters of a developed model.
B) Analysts create hypotheses only after performing an analysis.
C) Regression analysis is the most commonly used unsupervised data mining technique.
D) Data miners develop models prior to performing an analysis.
Answer: B
AACSB: Information Technology
Difficulty: 2: Moderate
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

60) _____ is an unsupervised data mining technique in which statistical techniques identify groups of entities that have similar characteristics.
A) Cluster analysis
B) Content indexing
C) Regression analysis
D) Cloud computing
Answer: A
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

61) In the case of _____, data miners develop models prior to conducting analyses and then apply statistical techniques to data to estimate parameters of the models.
A) pull publishing techniques
B) supervised data mining
C) push publishing techniques
D) unsupervised data mining
Answer: B
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

62) Regression analysis is used in _____.
A) progress reporting
B) bug reporting
C) supervised data mining
D) unsupervised data mining
Answer: C
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

63) _____ is used to measure the impact of a set of variables on another variable during data mining.
A) Cluster analysis
B) Context indexing
C) Cloud computing
D) Regression analysis
Answer: D
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

64) Which of the following statements is TRUE of BigData?
A) BigData contains only structured data.
B) BigData has low velocity and is generated slowly.
C) BigData cannot store graphics, audio, and video files.
D) BigData refers to data sets that are at least a petabyte in size.
Answer: D
AACSB: Information Technology
Difficulty: 2: Moderate
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

65) In the _____ phase, a BigData collection is broken into pieces and hundreds or thousands of independent processors search these pieces for something of interest.
A) crash
B) break
C) reduce
D) map
Answer: D
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

66) The results generated in the map phase are combined in the _____ phase.
A) pig
B) control
C) reduce
D) construct
Answer: C
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

67) _____ is an open source program supported by the Apache Foundation that manages thousands of computers and that implements MapReduce.
A) Hadoop
B) BigData
C) Linux
D) Apache Wave
Answer: A
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

68) Which of the following statements is TRUE of Hadoop?
A) Hadoop is written in C++ and runs on Linux.
B) Hadoop includes a query language called Big.
C) Hadoop is an open source program that implements MapReduce.
D) Technical skills are not required to run and use Hadoop.
Answer: C
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

69) Reporting analysis is used primarily for classifying and predicting BI data.
Answer: FALSE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

70) Structured data is data in the form of rows and columns.
Answer: TRUE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

71) With unsupervised data mining, analysts do not create a model or hypothesis before running the analysis.
Answer: TRUE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

72) Regression analysis is used to identify groups of entities that have similar characteristics.
Answer: FALSE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

73) Cluster analysis measures the impact of a set of variables on another variable.
Answer: FALSE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

74) BigData refers to data that have great variety and may have structured data as well as different formats.
Answer: TRUE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

75) BigData has low velocity and is generated slowly.
Answer: FALSE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

76) MapReduce is a technique for harnessing the power of thousands of computers working in parallel.
Answer: TRUE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

77) BigData has volume, velocity, and variation characteristics that far exceed those of traditional reporting and data mining.
Answer: TRUE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

78) What is data mining?
Answer: Data mining is the application of statistical techniques to find patterns and relationships among data for classification and prediction. Data mining techniques emerged from the combined discipline of statistics, mathematics, artificial intelligence, and machine-learning. Most data mining techniques are sophisticated, and many are difficult to use well. Such techniques are valuable to organizations, and some business professionals, especially those in finance and marketing, have become expert in their use. Data mining techniques fall into two broad categories: unsupervised and supervised.
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

79) What is unsupervised data mining?
Answer: With unsupervised data mining, analysts do not create a model or hypothesis before running the analysis. Instead, they apply a data mining technique to the data and observe the results. With this method, analysts create hypotheses after the analysis to explain the patterns found. These findings are obtained solely by data analysis.
One common unsupervised technique is cluster analysis. With it, statistical techniques identify groups of entities that have similar characteristics. A common use for cluster analysis is to find groups of similar customers from customer order and demographic data.
AACSB: Information Technology
Difficulty: 2: Moderate
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

80) Explain supervised data mining.
Answer: With supervised data mining, data miners develop a model prior to the analysis and apply statistical techniques to data to estimate parameters of the model. For example, suppose marketing experts in a communications company believe that cell phone usage on weekends is determined by the age of the customer and the number of months the customer has had the cell phone account. A data mining analyst would then run an analysis that estimates the impact of customer and account age. One such analysis, which measures the impact of a set of variables on another variable, is called a regression analysis.
AACSB: Information Technology
Difficulty: 2: Moderate
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

81) What is BigData?
Answer: BigData is a term used to describe data collections that are characterized by huge volume, rapid velocity, and great variety. Considering volume, BigData refers to data sets that are at least a petabyte in size, and usually larger. Additionally, BigData has high velocity, meaning that it is generated rapidly. BigData is varied. BigData may have structured data, but it also may have free-form text, dozens of different formats of Web server and database log files, streams of data about user responses to page content, and possibly graphics, audio, and video files. BigData analysis can involve both reporting and data mining techniques. The chief difference is, however, that BigData has volume, velocity, and variation characteristics that far exceed those of traditional reporting and data mining.
AACSB: Information Technology
Difficulty: 2: Moderate
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

82) _____ are business intelligence documents that are fixed at the time of creation and do not change.
A) Critical reports
B) Dynamic reports
C) Static reports
D) Exception reports
Answer: C
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.5: What Are the Alternatives for Publishing BI?
Classification: Concept

83) _____ are business intelligence documents that are updated at the time they are requested.
A) Subscriptions
B) Third-party cookies
C) Static reports
D) Dynamic reports
Answer: D
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.5: What Are the Alternatives for Publishing BI?
Classification: Concept

84) _____ are user requests for particular business intelligence results on a particular schedule or in response to particular events.
A) Subscriptions
B) Third-party cookies
C) Static reports
D) Dynamic reports
Answer: A
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.5: What Are the Alternatives for Publishing BI?
Classification: Concept

85) Which of the following statements is TRUE of business intelligence (BI) publishing alternatives?
A) The skills required to publish static content are extremely high.
B) It is more difficult to publish dynamic BI than to publish static content.
C) The skills required to create a publishing application for static content is high.
D) Push options for Web servers are manual.
Answer: B
AACSB: Information Technology
Difficulty: 2: Moderate
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.5: What Are the Alternatives for Publishing BI?
Classification: Concept

86) The _____ of business intelligence servers maintains metadata about the authorized allocation of business intelligence results to users.
A) exception report
B) dynamic report
C) delivery function
D) management function
Answer: D
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.5: What Are the Alternatives for Publishing BI?
Classification: Concept

87) Static reports are business intelligence documents that are updated at the time they are requested.
Answer: FALSE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.5: What Are the Alternatives for Publishing BI?
Classification: Concept

88) A printed sales analysis is an example of a dynamic report.
Answer: FALSE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.5: What Are the Alternatives for Publishing BI?
Classification: Concept

89) Push options are manual when emails or collaboration tools are used for BI publishing.
Answer: TRUE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.5: What Are the Alternatives for Publishing BI?
Classification: Concept

90) The skills required to create a publishing application for dynamic content are low.
Answer: FALSE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.5: What Are the Alternatives for Publishing BI?
Classification: Concept

91) The management function of BI servers maintains metadata about the authorized allocation of BI results to users.
Answer: TRUE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.5: What Are the Alternatives for Publishing BI?
Classification: Concept

92) Differentiate between static reports and dynamic reports.
Answer: Static reports are business intelligence documents that are fixed at the time of creation and do not change. A printed sales analysis is an example of a static report. In the business intelligence context, most static reports are published as PDF documents. Dynamic reports are business intelligence documents that are updated at the time they are requested. A sales report that is current as of the time a user accessed it on a Web server is a dynamic report. In almost all cases, publishing a dynamic report requires the business intelligence application to access a database or other data source at the time the report is delivered to the user.
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.5: What Are the Alternatives for Publishing BI?
Classification: Concept

93) Amazon uses business intelligence to decide product video.
Answer: TRUE
AACSB: Information Technology
Difficulty: 2: Moderate
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.1: How Do Organizations Use Business Intelligence (BI) Systems?
Classification: Concept

94) All of the ways below are examples of how BI is used for entertainment EXCEPT _____.
A) Netflix decided to buy *House of Cards* based on customer's viewing patterns
B) HBO decided to create *Game of Thrones* because the book was well written
C) Spotfiy uses customer data to determine where customers are listening to a particular band's song
D) Amazon has begun producing its own TV shows
Answer: B
AACSB: Information Technology
Difficulty: 2: Moderate
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.1: How Do Organizations Use Business Intelligence (BI) Systems?
Classification: Concept

95) When important life events occur, BI can help determine changes in purchasing patterns. This allows them to tailor sales and coupons to a particular event.
Answer: TRUE
AACSB: Information Technology
Difficulty: 2: Moderate
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.1: How Do Organizations Use Business Intelligence (BI) Systems?
Classification: Concept

96) Which BI activity would a company be participating in if they used data mining to determine when to place rain boots on the shelves?
A) performing analysis
B) publishing reports
C) acquiring data
D) automating reports
Answer: A
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.2: What Are the Three Primary Activities in the BI Process?
Classification: Concept

97) Knowledge workers always have data pushed to them to make decisions.
Answer: FALSE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.2: What Are the Three Primary Activities in the BI Process?
Classification: Concept

98) Which BI activity would a company be participating in if they were cataloging?
A) push publishing
B) pull publishing
C) data acquisition
D) data mining
Answer: C
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.2: What Are the Three Primary Activities in the BI Process?
Classification: Concept

99) Artificial intelligence applications are being used to help users process large amounts of data and make decisions.
Answer: TRUE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

100) In general it is better to have too fine a granularity than too coarse.
Answer: TRUE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

101) Big Data has _____ meaning that it is generated rapidly.
A) high velocity
B) volume
C) fast processing times
D) web servers
Answer: A
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

102) What is the query language used in Hadoop?
A) Pig
B) Cow
C) SQL
D) NoSQL
Answer: A
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

103) Which option below is an example of a status BI report?
A) Web server
B) Email
C) SharePoint
D) BI Server
Answer: B
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.5: What Are the Alternatives for Publishing BI?
Classification: Concept

104) Everyday at 4:30 pm. Julie has a report delivered to her email about the sales for the day. This type of report is a _____.
A) subscription
B) pull report
C) sales report
D) application report
Answer: A
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.5: What Are the Alternatives for Publishing BI?
Classification: Concept

105) The function of a business intelligence (BI) system is to _____.
A) extract data and make it available for those who need it
B) acquire data
C) show customers how to make better purchase
D) teach executives how to read reports
Answer: A
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.1: How Do Organizations Use Business Intelligence (BI) Systems?
Classification: Concept

106) James is a manager for ABC Tech Store, Inc. James asks for a report to view which products are selling faster than others so he can decide to what to order for next quarter. James is using business intelligence (BI) in what matter?
A) deciding
B) informing
C) problem solving
D) project management
Answer: B
AACSB: Information Technology
Difficulty: 2: Moderate
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.1: How Do Organizations Use Business Intelligence (BI) Systems?
Classification: Concept

107) Business intelligence (BI) systems help managers customize marketing plans.
Answer: TRUE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.1: How Do Organizations Use Business Intelligence (BI) Systems?
Classification: Concept

108) _____ is the second primary activity in the business intelligence process.
A) Publish results
B) Acquire data
C) Organize and relate data
D) Perform analysis
Answer: D
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.2: What Are the Three Primary Activities in the BI Process?
Classification: Concept

109) All of the activities below are a part of the "acquire data" business intelligence activity EXCEPT _____.
A) print reports
B) obtain data
C) organize and relate data
D) catalog data
Answer: D
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.2: What Are the Three Primary Activities in the BI Process?
Classification: Concept

110) Business intelligence is only as intelligent as the people creating it.
Answer: TRUE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.2: What Are the Three Primary Activities in the BI Process?
Classification: Concept

111) Knowledge workers are generally specialists in data analysis, whereas business intelligence workers are often nonspecialist users of BI results.
Answer: FALSE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

112) Which of the answers below is an example of dirty data?
A) 526 for a customer's age
B) Jane for a first name
C) 2 for the number of adults in the household
D) 0 for the number of pets
Answer: A
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.3: How Do Organizations Use Data Warehouses and Data Marts to Acquire Data?
Classification: Concept

113) Michael is asking for a business intelligence to predict when to place Valentine's Day merchandise on the shelves. Michael is asking for what type of analysis?
A) Reporting
B) Data Mining
C) Big Data
D) Monthly Report
Answer: B
AACSB: Information Technology
Difficulty: 2: Moderate
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

114) Hadoop is so simple anyone can run it.
Answer: FALSE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.4: What Are Three Techniques for Processing BI Data?
Classification: Concept

115) A person needs a high skill level to create a publishing application.
Answer: FALSE
AACSB: Information Technology
Difficulty: 1: Easy
Course LO: Compare and contrast different business intelligence systems.
Learning Obj: LO 3.5: What Are the Alternatives for Publishing BI?
Classification: Concept