Microsoft Azure Data Fundamentals

1. HOTSPOT (Drag and Drop is not supported)
To complete the sentence, select the appropriate option in the answer area.

Descriptive analytics tells you ▼

what is most likely to occur in the future.
what occurred in the past.
which actions you can perform to affect outcomes.
why something occurred in the past.

A. See Explanation section for answer.

Answer(s): A

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2. HOTSPOT (Drag and Drop is not supported)
For each of the following statements, select Yes if the statement is true. Otherwise, select No. NOTE: Each correct selection is worth one point.

Statements	Yes	No
Normalization involves eliminating relationships between database tables.	○	○
Normalizing a database reduces data redundancy.	○	○
Normalization improves data integrity.	○	○

A. See Explanation section for answer.

Answer(s): A

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3. DRAG DROP (Drag and Drop is not supported)
Match the types of analytics that can be used to answer the business questions.
To answer, drag the appropriate analytics type from the column on the left to its question on the right. Each analytics type may be used once, more than once, or not at all.
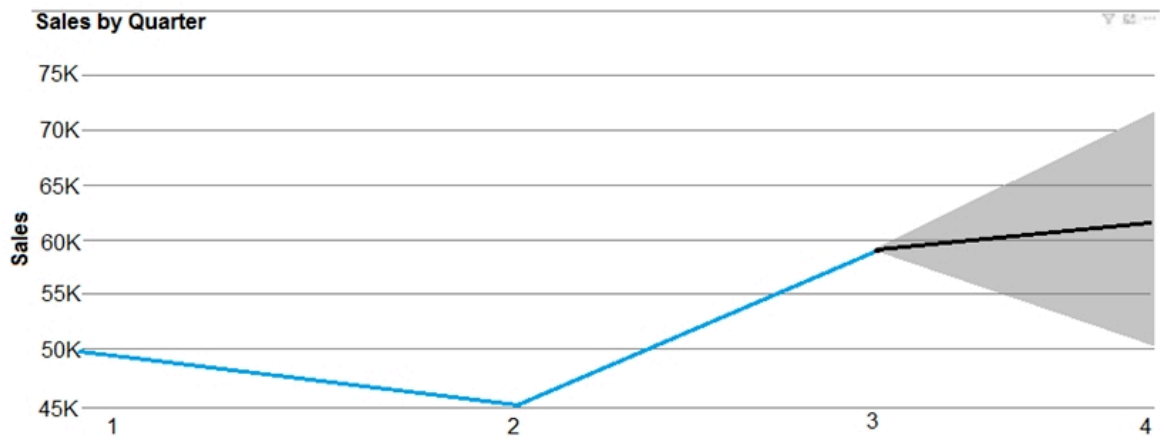NOTE: Each correct match is worth one point.

Analytics Types

Cognitive
Diagnostic
Descriptive
Predictive
Prescriptive

Answer Area

Why did sales increase last month? [ ]

Provide specific guidance on how to allocate current budget to buy different inventory items. [ ]

Detect images of the company's logo included in PDF documents [ ]

A. See Explanation section for answer.

Answer(s): A

4. Your company recently reported sales from the third quarter. You have the chart shown in the following exhibit.

Sales by Quarter

Which type of analysis is shown for the fourth quarter?

A. predictive

B. prescription

C. descriptive

D. diagnostic

Answer(s): A

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5. HOTSPOT (Drag and Drop is not supported)

You have the following JSON document.

```
"customer" : {
    "first name" : "Ben",
    "last name" : "Smith",
    "address" : {
        "line 1" : "161 Azure Ln",
        "line 2" : "Palo Alto",
        "ZIP code" : "54762"
    },
    "social media": [
        {
            "service" : "twitter",
            "handle" : "@bensmith"
        },
        {
            "service" : "linkedin",
            "handle" : "bensmith"
        }
    ],
    "phone numbers": [
        {
            "type" : "mobile",
            "number" : "555-555-555"
        }
    ]
}
```

Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the JSON document.

NOTE: Each correct selection is worth one point.

Customer is [answer choice].

| a nested array |
| a nested object |
| a root object |

Address is [answer choice].

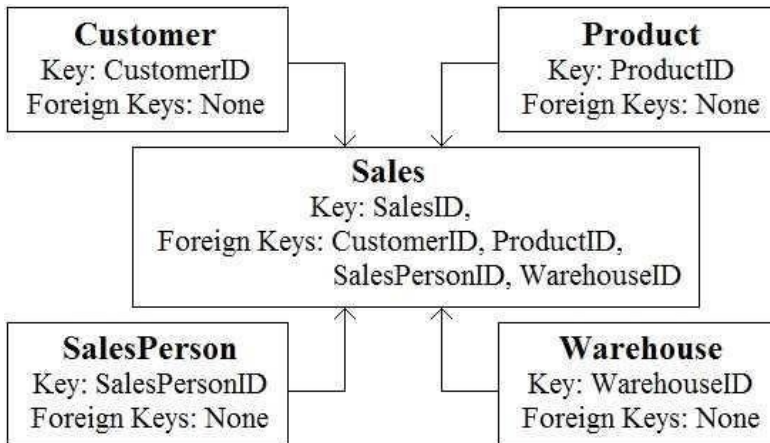| a nested array |
| a nested object |
| a root object |

Social media is [answer choice].

| a nested array |
| a nested object |
| a root object |

A. See Explanation section for answer.

Answer(s): A

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6. HOTSPOT (Drag and Drop is not supported)
You are reviewing the data model shown in the following exhibit.

Customer
Key: CustomerID
Foreign Keys: None

Product
Key: ProductID
Foreign Keys: None

Sales
Key: SalesID,
Foreign Keys: CustomerID, ProductID,
SalesPersonID, WarehouseID

SalesPerson
Key: SalesPersonID
Foreign Keys: None

Warehouse
Key: WarehouseID
Foreign Keys: None

Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic.
NOTE: Each correct selection is worth one point

The data model is a [answer choice].

| transactional model |
| star schema |
| snowflake schema |

Customer is a [answer choice] table.

| fact |
| dimension |
| bridge |

A. See Explanation section for answer.

Answer(s): A

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7. DRAG DROP (Drag and Drop is not supported)
Your company plans to load data from a customer relationship management (CRM) system to a data warehouse by using an extract, load, and transform (ELT) process.
Where does data processing occur for each stage of the ELT process? To answer, drag the appropriate locations to the correct stages. Each location may be used once, more than once, or not at all. You may

need to drag the split bar between panes or scroll to view content.
NOTE: Each correct selection is worth one point.
Select and Place:

Locations	Answer Area	
An in-memory data integration tool	Extract:	Location
The CRM system	Load:	Location
The data warehouse	Transform:	Location

A. See Explanation section for answer.

Answer(s): A

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8. DRAG DROP (Drag and Drop is not supported)
Match the types of visualizations to the appropriate descriptions.
To answer, drag the appropriate visualization type from the column on the left to its description on the right.
Each visualization type may be used once, more than once, or not at all.
NOTE: Each correct match is worth one point.

Visualizations	Answer Area	
Key influencer	Visualization	A chart of colored, nested rectangles that displays ind points represented by the size and color of a relative r
Scatter	Visualization	A chart that displays the major contributors of a select value.
Treemap	Visualization	A chart that shows the relationship between two nume

A. See Explanation section for answer.

Answer(s): A

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9. You need to create an Azure Storage account.
Data in the account must replica outside the Azure region automatically.
Which two types of replica can you us for the storage account? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one pint.

☐ A. zone-redundant storage (ZRS)

☐ B. read-access geo-redundant storage (RA-GRS)

☐ C. locally-redundant storage (LRS)

☐ D. geo-redundant storage (GRS)

Answer(s): B D

10. Which statement is an example of Data Manipulation Language (DML)?

A. REVOKE

B. DISABLE

C. INSERT

D. GRANT

Answer(s): C

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11. You have a SQL query that combines customer data and order data. The query includes calculated columns.
You need to create a database object that would allow other users to rerun the same SQL query.
What should you create?

A. an index

B. a view

C. a scalar function

D. a table

Answer(s): B

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12. HOTSPOT (Drag and Drop is not supported)
To complete the sentence, select the appropriate option in the answer area.

Answer Area

A key/value data store is optimized for

▼
enforcing constraints
simple lookups
table joins
transactions

A. See Explanation section for answer.

Answer(s): A

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13. DRAG DROP (Drag and Drop is not supported)
Match the types of data to the appropriate Azure data services.
To answer, drag the appropriate data types from the column on the left to its service on the right. Each data type may be used once, more than once, or not at all.

NOTE: Each correct match is worth one point.

Data Types

Image files

Key/value pairs

Relationships between employees

Answer Area

Data type	Azure Blob storage
Data type	Azure Cosmos DB G
Data type	Azure Table storage

A. See Explanation section for answer.

Answer(s): A

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14. DRAG DROP (Drag and Drop is not supported)
Match the Azure Data Lake Storage terms to the appropriate levels in the hierarchy.
To answer, drag the appropriate term from the column on the left to its level on the right. Each term may be used once, more than once, or not at all.
NOTE: Each correct match is worth one point.

Terms

Azure Storage account

File share

Container

Answer Area

Azure Resource Group

Term

Term

Folders

Files

A. See Explanation section for answer.

Answer(s): A

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15. What are two characteristics of real-time data processing? Each correct answer present a complete solution. NOTE: Each correct selection is worth one point.

☐ A. Data is processed as it is created.

☐ B. Low latency is expected

☐ C. High latency acceptable

☐ D. Data is processed periodically

Answer(s): B D

16. DRAG DROP (Drag and Drop is not supported)

match the Azure data factory components to the appropriate descriptions.

To answer, drag the appropriate component from the column on the left to its description on the right. Each component may be used once, more than once, or not at all.

NOTE: Each correct match is worth one point.

Components

| Dataset |
| Linked service |
| Mapping data flow |
| Pipeline |

Answer Area

Component	A representation of data structures within dat
Component	The information used to connect to external r
Component	A logical grouping of activities that performs a work and can be scheduled

A. See Explanation section for answer.

Answer(s): A

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17. DRAG DROP (Drag and Drop is not supported)

Match the types of workloads to the appropriate scenarios.

To answer, drag the appropriate workload type from the column on the left to its scenario on the right. Each workload type may be used once, more than once, or not at all.

NOTE: Each correct match is worth one point.

Workload Types

| Batch |
| Streaming |

Answer Area

Workload type	Data for a product catalog will be loaded every 12 hours to a data warehouse.
Workload type	Thousands of data sets per second for online purcha will be loaded into a data warehouse in real time
Workload type	Updates to inventory data will be loaded to a data warehouse every 1 million transactions.

A. See Explanation section for answer.

Answer(s): A

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18. DRAG DROP (Drag and Drop is not supported)

Your company plans to load data from a customer relationship management (CRM) system to a data warehouse by using an extract, load, and transform (ELT) process.

Where does data processing occur for each stage of the ELT process? To answer, drag the appropriate locations to the correct stages. Each location may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Locations

A standalone data analysis tool	Extract:	
The CRM system	Load:	
The data warehouse	Transform:	

A. See Explanation section for answer.

Answer(s): A

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19. HOTSPOT (Drag and Drop is not supported)
To complete the sentence, select the appropriate option in the answer area.
Hot Area:

Answer Area

A visualization that illustrates a university's current student enrollment per department is an example of [▼] analytics.

- cognitive
- descriptive
- predictive
- prescriptive

A. See Explanation section for answer.

Answer(s): A

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20. Which two Azure services can be used to provision Spark clusters? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

☐ A. Azure Databricks

☐ B. Azure Log Analytics

☐ C. Azure Time Series Insights

☐ D. Azure HDinsight

Answer(s): A D