

## Describe AI workloads and considerations

### Identify features of common AI workloads

**Question 1: Which scenario is an example of the forecasting AI workload?**

Choose the correct answer

Detecting pedestrians in the real-time video stream of an autonomous vehicle

Detecting the language in the provided text document

Providing answers to a customer in a chatbot dialog

Predicting whether an airplane arrives early, on-time, or late

Question 2:

Which scenario is an example of the natural language processing AI workload?

Choose the correct answer

Using graphics and menus to improve the user experience with an ecommerce website's chatbot

Predicting whether a customer would buy certain items based on their purchase history

Analyzing customer feedback on an ecommerce website to determine whether it is positive or negative

Detecting whether people in online-posted images are celebrities

Question 3:

Which scenario is an example of the conversational AI workload?

Choose the correct answer

Generating automatic descriptions for published images

Predicting whether customers should be targeted by a new marketing campaign

Using a chatbot to answer common customer questions

Extracting key phrases from student essays

Question 4:

To complete the sentence, select the appropriate option from the drop-down menu.

Choose the correct options

\_\_\_\_\_ is the process of using machine learning to monitor and detect

\_\_\_\_\_ unexpected items or events in time series data that differ from the norm.

Anomaly detection

Prediction

Knowledge mining

Question 5:

For each of the following statements, select Yes if the statement is true.  
Otherwise, select No.

Statement	Yes	No
Computer Vision can be used to analyze static images.	<input type="radio"/>	<input type="radio"/>
Computer Vision can be used to analyze live video streams.	<input type="radio"/>	<input type="radio"/>
Computer Vision can be used to analyze live audio streams.	<input type="radio"/>	<input type="radio"/>

Question 6:

For each of the following statements about the anomaly detector workload, select Yes if the statement is true. Otherwise, select No.

Statement	Yes	No
Anomalies can be detected by AI as they occur in real time.	<input type="radio"/>	<input type="radio"/>
Anomalies can be detected by AI throughout a historical dataset.	<input type="radio"/>	<input type="radio"/>

Anomaly detection boundaries that are automatically created by AI are immutable.	<input type="radio"/>	<input type="radio"/>
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Question 7:

For which of these scenarios should you use an AI-based prediction solution?

Choose the correct answer

Determining the likely repair costs for an accident involving a vehicle

Detecting abnormal events in a vehicle's engine

Detecting the speed limit using roadside signage

Determining the distance to the vehicle in front

Question 8:

For each of the following statements about anomaly detection, select Yes if the statement is true. Otherwise, select No.

Statement	Yes	No
Anomaly detection enables pre-emptive action to be taken before a problem occurs.	<input type="radio"/>	<input type="radio"/>
Anomaly detection predicts when problems will occur.	<input type="radio"/>	<input type="radio"/>
Anomaly detection analyzes data over time.	<input type="radio"/>	<input type="radio"/>

Question 9:

Match the AI workload to the scenario. To answer, drag the appropriate workload to each scenario. A workload may be used once, more than once, or not at all.

Drag and drop the answers

Drag and drop the answers

Applications that interpret  
visual input from images

Applications that interpret  
written text

Applications that engage in  
dialogs with humans

Computer vision

Conversational AI

Natural language processing

Anomaly detection

Forecasting

Question 10:

For which scenario should you use Computer Vision?

Choose the correct answer

Finding relevant information to answer a specific customer question

Translating commands into actions

Detecting abnormalities in health scans

Discovering financial system fraud

Question 11:

To complete the following sentence, select the appropriate option from the drop-down menu.

Choose the correct options

Extracting key insights from structured and unstructured  
data sources is a feature of

Anomaly detection

Conversational AI

Knowledge mining

The prediction models

Question 12:

For which two of these scenarios should you use Conversational AI? Each correct answer presents a complete solution.

**Choose the correct answers**

Translating speech from one language to another.

Making a travel reservation.

Detecting a change in hospital infection rates.

Detecting spam in emails.

Answering frequently asked questions.

Question 13: Which two guiding principles are part of Microsoft's responsible AI approach? Each correct answer presents a complete solution.

**Choose the correct answers**

Simplified Identity Governance

Secure Adaptive Access

Seamless User Experiences

Reliability and Safety

Inclusiveness

Question 14: A company gives clear explanations of how the banking AI system works and what factors it considers in approving mortgage applications. Which responsible AI principle is this an example of?

**Choose the correct answer**

Inclusiveness

Accountability

Fairness

Transparency

Question 15: A company carries out rigorous testing and deployment management of the AI system that powers a driverless taxi solution. This is an example of applying which responsible AI principle?

**Choose the correct answer**

Inclusiveness

Transparency

Reliability and safety

Accountability

Question 16: An HR AI system screens job candidates without taking into account personal factors such as age, gender, ethnicity, or physical abilities. This is an example of applying which responsible AI principle?

**Choose the correct answer**

Inclusiveness  
Accountability  
Fairness  
Transparency

Question 17: For each of the following statements, select Yes if the statement is true. Otherwise, select No.

Statement	Yes	No
According to the Transparency principle, AI systems should treat all people fairly.	<input type="radio"/>	<input type="radio"/>
According to the Reliability and Safety principle, AI systems should be secure and respect privacy.	<input type="radio"/>	<input type="radio"/>
According to the Accountability principle, people should be accountable for AI systems.	<input type="radio"/>	<input type="radio"/>

Question 18: To complete the sentence, select the appropriate option from the drop-down menu.

Choose the correct options

According to the  guiding principle, AI systems should empower everyone and engage people.

Fairness  
Inclusiveness  
Transparency

Question 20: To complete the sentence, select the appropriate option from the drop-down menu.

Choose the correct options

is the responsible AI principle requiring rigorous testing of an AI-based app to eliminate potential risk to human life.

Accountability

Privacy and security

Reliability and safety

Question 21: Match the responsible AI principles to the objective. To answer, drag the appropriate principle to each objective. A principle may be used once, more than once, or not at all.

Drag and drop the answers

Drag and drop the answers

Protect personal information

Quantify risks and harm to life

Gain trust from users

Privacy & Security

Reliability & Safety

Transparency

Accountability

Fairness

Inclusiveness

Question 22: For each of the following statements about inclusiveness, select Yes if the statement is true. Otherwise, select No.

Statement	Yes	No
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Inclusiveness brings the benefits of an AI-based solution to all members of society.	<input type="radio"/>	<input type="radio"/>
Inclusiveness makes users aware of the purpose and limitations of an AI-based solution.	<input type="radio"/>	<input type="radio"/>
Inclusiveness is an AI-based solution that empowers and engages all communities in the world.	<input type="radio"/>	<input type="radio"/>

Question 23: Which responsible AI principle is concerned with making users aware of the limitations of an AI-based system?

Choose the correct answer

- Fairness
- Transparency
- Accountability
- Inclusiveness

Question 24: Which two of these scenarios does the accountability responsible AI principle apply to? Each correct answer presents a complete solution.

Choose the correct answers

- Keeping personal details private
- Following a governance framework
- Operating as expected
- Meeting ethical standards
- Treating people fairly

Describe fundamental principles of machine learning on Azure

Identify common machine learning types

Question 25: Predicting the online sales volume for the next financial quarter is an example of what machine learning scenario?

Choose the correct answer

- Regression
- Clustering
- Classification



Question 26: Analyzing X-ray images to detect whether a person has pneumonia is an example of what machine learning scenario?

Choose the correct answer

Classification

Regression

Clustering

Question 27: Grouping together online shoppers with similar traits for targeted marketing is an example of what machine learning scenario?

Choose the correct answer

Clustering

Classification

Regression

Question 28: To complete the sentence, select the appropriate option from the drop-down menu.

Choose the correct options

\_\_\_\_\_ is a machine learning method of grouping data points that possess similar traits.

classification

clustering

regression

Question 29: To complete the sentence, select the appropriate option from the drop-down menu.

Choose the correct options

\_\_\_\_\_ is a machine learning method that predicts / determines the category, type or class of

a data item.

Classification

clustering

regression

Question 30: Forecasting stock market index values based on macro-economic changes is an example of what machine learning scenario?

Choose the correct answer

Classification

Clustering

Regression

Question 31: Processing new tweets to categorize them as positive or negative is an example of what machine learning scenario?

**Choose the correct answer**

Clustering  
Classification  
Regression

Question 32: Which machine learning type should you use to predict ice cream sales based on the weather forecast?

**Choose the correct answer**

Clustering  
Classification  
Regression

Question 33: Which machine learning type should you use to determine the amount of credit to give to a customer?

**Choose the correct answer**

Classification  
Clustering  
Regression

Question 34: Which machine learning type should you use to determine if a social media post has positive or negative sentiment?

**Choose the correct answer**

Classification  
Clustering  
Regression

Question 35: Which machine learning type should you use to approve or reject a customer's application for credit?

**Choose the correct answer**

Clustering  
Classification  
Regression

Question 36: To complete the following sentence, select the appropriate option from the drop-down menu.

**Choose the correct options**

machine learning type is an example of unsupervised learning.

classification

clustering

Regression

Question 37: To complete the following sentence, select the appropriate option from the drop-down menu.

**Choose the correct options**

is the type of machine learning that groups unlabeled data using similarities in the data.

classification

clustering

regression

[Describe core machine learning concepts](#)

Question 38: Which two metrics can you use to evaluate classification machine learning models? Each correct answer presents a complete solution.

**Choose the correct answers**

Mean Absolute Error (MAE)

Precision

Recall

Average Distance to Cluster Center

**Previous**

Question 39: Which two metrics can you use to evaluate regression machine learning models? Each correct answer presents a complete solution.

**Choose the correct answers**

Number of Points

Coefficient of Determination

F-score

Root Mean Squared Error (RMSE)

Question 40: You train a machine learning model on the flowers dataset to predict the type of the iris species. Sample records from the dataset are shown in the exhibit.

Exhibit

Sepal Length	Petal Length	Flower Species
5.1	1.4	Iris-setosa
4.9	1.4	Iris-setosa
6.4	4.5	Iris-versicolor
6.8	5.9	Iris-virginica
6.7	5.7	Iris-virginica

What do Sepal Length and Flower Species represent in the dataset? To answer, select the appropriate options from the drop-down menus.

Choose the correct options

Sepal Length is a **A** column, while Flower Species is a **B** column.

- A)
1. Algorithm
  2. Feature
  3. Label
- B)
4. Algorithm
  5. Feature
  6. Label

Question 41: You need to hold back a dataset from model training so it can be used to estimate a model's prediction error while tuning its hyperparameters. Which dataset should you use?

Choose the correct answer

Training dataset  
Testing dataset  
Raw data  
Validation dataset

Question 42: You train a new machine learning model using a classification algorithm. You need to ensure that your model iterates over the whole dataset during the training process only a certain number of times. Which setting should you adjust?

Choose the correct answer

Epoch  
Learning rate  
Random seed  
Batch size

Question 43: In the evaluation of the classification model, you get a value of 0.4 for the area under the curve (AUC) metrics. What does it mean?

Choose the correct answer

40 percent of data is allocated to training and 60 percent to testing.

60 percent of data is allocated to training and 40 percent to testing.

The model is performing worse than a random guess.

The model is performing better than a random guess.

Question 44:

You are building a machine learning model to predict a person's income based on their height and age. The exhibit shows a sample from an income dataset:

Exhibit		
Height (cms)	Age	Income
176	23	25,000
160	44	20,000
185	37	50,000
180	61	45,000
155	29	37,500
190	34	60,000
160	26	18,000

What do the following columns in the dataset represent? To answer, select the appropriate options from the drop-down menus.

Choose the correct options

Income	<b>A</b>
Age	<b>B</b>
Height	<b>C</b>

- A)
1. Feature
  2. Hyperparameter
  3. label
- B)
4. Feature
  5. Hyperparameter
  6. Label

C)

- 7. Feature
- 8. Hyperparameter
- 9. label

Question 45: Which two datasets do you use to build a machine learning model? Each correct answer presents part of the solution.

**Choose the correct answers**

Training dataset  
Azure Open Dataset  
Validation dataset  
Testing dataset

Question 46: To complete the following sentence, select the appropriate option from the drop-down menu.

**Choose the correct options**

A machine learning (ML) algorithm discovers  in data when a model is trained.

Pattern  
Prediction  
Probabilities

Question 47: Which two metrics can you use to evaluate a classification machine learning model? Each correct answer presents a complete solution.

**Choose the correct answers**

Coefficient of determination  
Maximal Distance to Cluster Center  
F-score  
Root mean squared error (RMSE)  
Precision

Question 48: Which two metrics can you use to evaluate a regression machine learning model? Each correct answer presents a complete solution.

**Choose the correct answers**

Average Distance to Cluster Center  
Relative absolute error (RAE)  
Area under the curve (AUC)  
Precision  
Coefficient of determination

Question 49: You evaluate a machine learning model, and it generates the matrix shown in the following exhibit:

### Exhibit

		Actual	
Predicted	1	577	245
	0	397	1781

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

Statement	Yes	No
The machine learning model is a classification model.	<input type="radio"/>	<input type="radio"/>
There are 397 false positives.	<input type="radio"/>	<input type="radio"/>
There are 1781 true negatives.	<input type="radio"/>	<input type="radio"/>

Question 50: Which technique does each of these family of algorithms use when training a model? To answer, select the appropriate options from the drop-down menus.

Choose the correct options

Classification **A**

Clustering **B**

Regression **C**

- A)
1. Reinforcement
  2. Supervised
  3. Unsupervised
- B)
4. Reinforcement
  5. Supervised
  6. Unsupervised
- C)
7. Reinforcement
  8. Supervised
  9. Unsupervised

Identify core tasks in creating a machine learning solution

Question 51: What should you do to measure the accuracy of the predictions and assess model fit?

Choose the correct answer

- Evaluate the model.  
Detect languages.  
Score the model.  
Evaluate the probability function.

Previous

Question 52: To complete the sentence, select the appropriate option from the drop-down menu.

Choose the correct options

\_\_\_\_\_ is the process of selecting a subset of relevant features to use in building a machine learning model.

- Feature selection  
Cross-validation  
Evolution



Question 53: For each of the following statements about data splitting in machine learning, select Yes if the statement is true. Otherwise, select No.

Statement	Yes	No
You can divide a dataset using regular expression.	<input type="radio"/>	<input type="radio"/>
You can split a dataset for training/testing by rows.	<input type="radio"/>	<input type="radio"/>
You can split a dataset for training/testing by columns.	<input type="radio"/>	<input type="radio"/>

Question 54: Which data transformation method is used in machine learning to create a smaller dataset representative of the original massive dataset?

Choose the correct answer

- Sampling
- Normalization
- Feature hashing
- Splitting

Question 55: To complete the following sentence, select the appropriate option from the drop-down menu.

Choose the correct options

\_\_\_\_\_ is the process in which unstructured data is extracted from one or multiple sources  
\_\_\_\_\_ and then prepared for training machine learning models.

- Data ingestion
- Value clipping
- Data export

Question 56: Which two are types of distributed machine learning model training? Each correct answer presents a complete solution.

**Choose the correct answers**

Model parallelism  
Data normalization  
Data parallelism  
Model evaluation  
Model interpretability

Question 57: To which two compute targets can you deploy a machine learning model as a web service? Each correct answer presents a complete solution.

**Choose the correct answers**

Azure Service Bus  
Azure Container Instances. (ACI)  
Azure Kubernetes Service. (AKS)  
Azure IoT Hub  
Azure Event Hub

Question 58: To complete the following sentence, select the appropriate option from the drop-down menu.

**Choose the correct options**

is used to increase the predictive power of a machine learning model.

evaluation  
Feature engineering  
Feature selection

Question 59: What should you do after training your model and prior to deploying it as a web service?

**Choose the correct answer**

Clone the training pipeline.  
Create a compute cluster.  
Evaluate the model.  
Create an inference pipeline from the training pipeline.

Question 60: You train a machine learning model. The model evaluation had low training error and high accuracy. You deploy the model, and you see a high error rate when predicting new values. What should you do to improve predictions?

**Choose the correct answer**

Cross validate the model.  
Normalize the data.  
Add features.  
Split the training data.

Question 61: A dataset contains attributes that have values in different units with different ranges of values. Which data pre-processing method is used to transform the values into a common scale?

**Choose the correct answer**

Normalization  
Binning  
Substitution  
Sampling

Question 62: What should you do to measure the accuracy of a trained machine learning model?

**Choose the correct answer**

Score the model.  
Summarize the data.  
Normalize the data.  
Create features.

Question 63: Which compute target should you use for the development of machine learning models?

**Choose the correct answer**

Azure Container Instances (ACI)  
Compute cluster  
Azure Kubernetes Service (AKS)  
Compute instance

[Describe capabilities of no-code machine learning with Azure Machine Learning](#)

Question 64: You build a new pipeline in Azure Machine Learning Designer to predict potential flight delays. 70 percent of the flight delays data is to be allocated to training, and the remaining 30 percent to testing. Which modules should you use to complete the pipeline configuration? To answer, drag the appropriate module name to the relevant slots. A module name may be used once, more than once, or not at all.

The screenshot displays the Microsoft Azure Machine Learning Designer interface. The top navigation bar shows "AzML > Designer (preview) > Authoring". The main workspace is titled "AI-900 Regression" and features a toolbar with icons for Autosave, Save, Undo, Redo, Copy, Paste, Delete, and a 100% zoom level. The pipeline diagram consists of the following modules and connections:

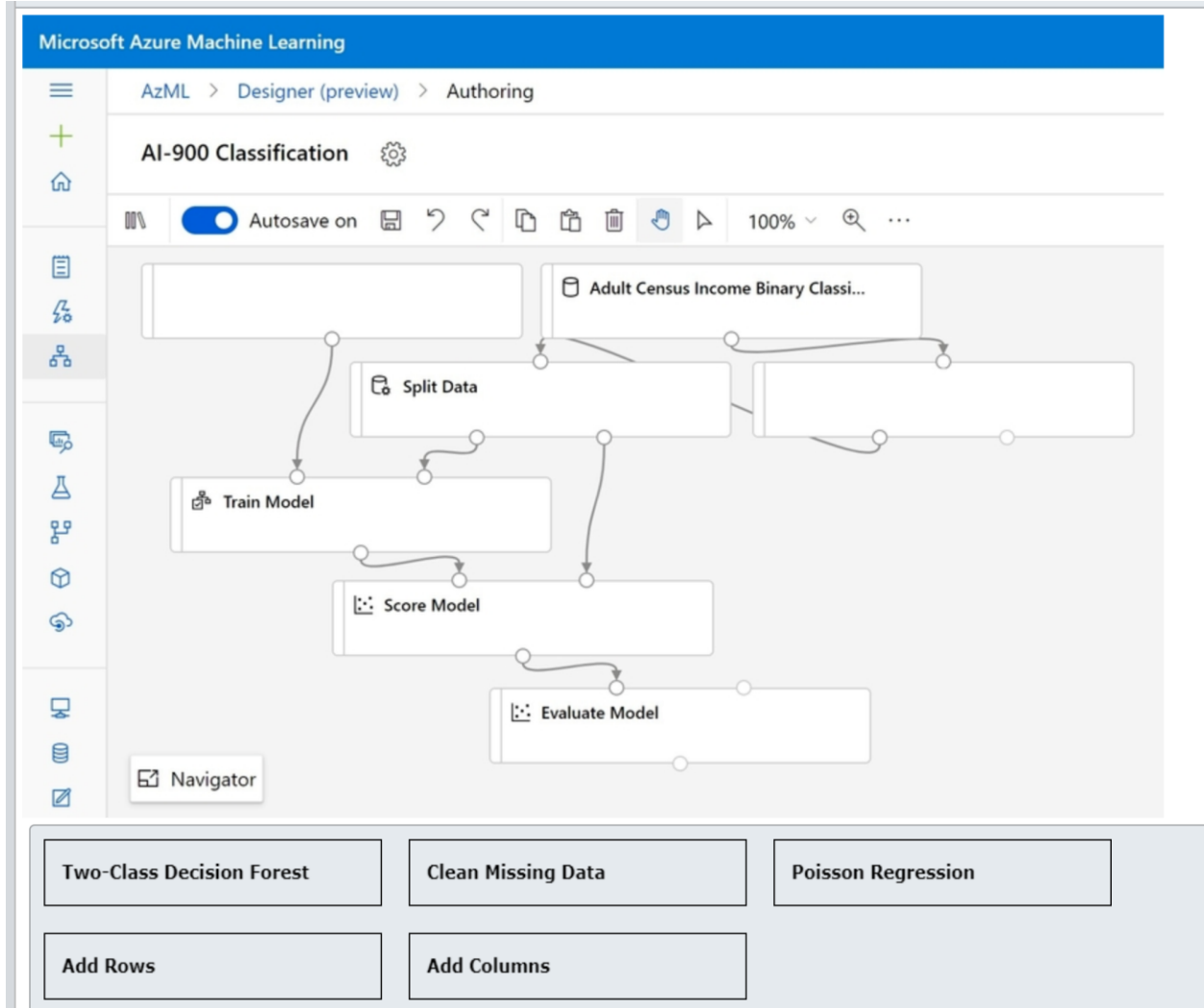
- Flight Delays Data** (Dataset) connects to a blank module.
- A blank module connects to the **Train Model** module.
- The **Train Model** module connects to the **Score Model** module.
- Another blank module connects to the **Score Model** module.
- The **Score Model** module has an output connection point.

A "Navigator" panel is visible in the bottom-left corner. The bottom of the interface contains a palette of modules:

- Linear Regression
- Split Data
- K-Means Clustering
- Join Data
- Select Columns in Dataset

Question 65: You build a new pipeline in Azure Machine Learning Designer to predict from the census data whether a person will earn more or less than \$50,000 per year.

You need to populate the records with the empty numeric fields with the column's mean values. What modules should you use to complete the pipeline configuration? To answer, drag the appropriate module names to the relevant slots. A module name may be used once, more than once, or not at all.



Question 66: For each of the following statements about Azure Machine Learning (Azure ML) designer, select Yes if the statement is true. Otherwise, select No.

Statement	Yes	No
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You can connect datasets directly to each other.	<input type="radio"/>	<input type="radio"/>
You can connect modules directly to each other.	<input type="radio"/>	<input type="radio"/>
Pipeline endpoint can be used to send and receive data in real time.	<input type="radio"/>	<input type="radio"/>

Question 67: What should you configure in Automated Machine Learning (AutoML) settings to ensure that it follows the Transparency principle of Responsible AI?

**Choose the correct answer**

- Enable Explain best model option.
- Set Primary metric to Accuracy.
- Set Validation type to Auto.
- Select RandomForest in Blocked algorithms list.

Question 68: Which two data source types are supported in Azure Automated Machine Learning (AutoML)? Each correct answer presents a complete solution.

**Choose the correct answers**

- File Dataset
- Tabular Dataset
- Azure Cosmos DB
- Azure Cache for Redis
- Azure Database for MySQL

Question 69: To complete the following sentence, select the appropriate option from the drop-down menu.

**Choose the correct options**

\_\_\_\_\_ is a process in which the best machine learning algorithm to use for your specific data is selected for you.

- Automated machine learning (AutoML)
- Normalization
- Feature engineering

Question 70: Which two types of datasets can you register and use to train your Automatic Machine Learning (AutoML) model? Each correct answer presents a complete solution.

**Choose the correct answers**

- SQL Query

Folder  
Azure Blob Container  
File  
Tabular

Question 71: Your dataset has multiple numeric features whose values are on different scales. Which module should you add to the training pipeline in the Azure Machine Learning (ML) designer to mitigate bias?

Choose the correct answer

Normalize Data  
Clip Values  
Clean Missing Data  
Select Columns in Dataset

Question 72: You plan to use Azure Machine Learning designer to create a classification machine learning model. Which Azure Machine Learning workspace edition should you use?

Choose the correct answer

Enterprise  
Production  
Basic  
Dev-test

Question 73: You use Automated machine learning (ML) to find the best model for your data. Which option should you use to interpret and provide transparency for the model selected?

Choose the correct answer

Target column  
Forecast horizon  
Enable deep learning  
Explain best model

Question 74: For each of the following statements, select Yes if the statement is true. Otherwise, select No.

Statement	Yes	No
The Azure Machine Learning studio supports both no-code and code-first experiences.	<input type="radio"/>	<input type="radio"/>
The Azure Machine Learning studio can create and run Jupyter notebooks.	<input type="radio"/>	<input type="radio"/>

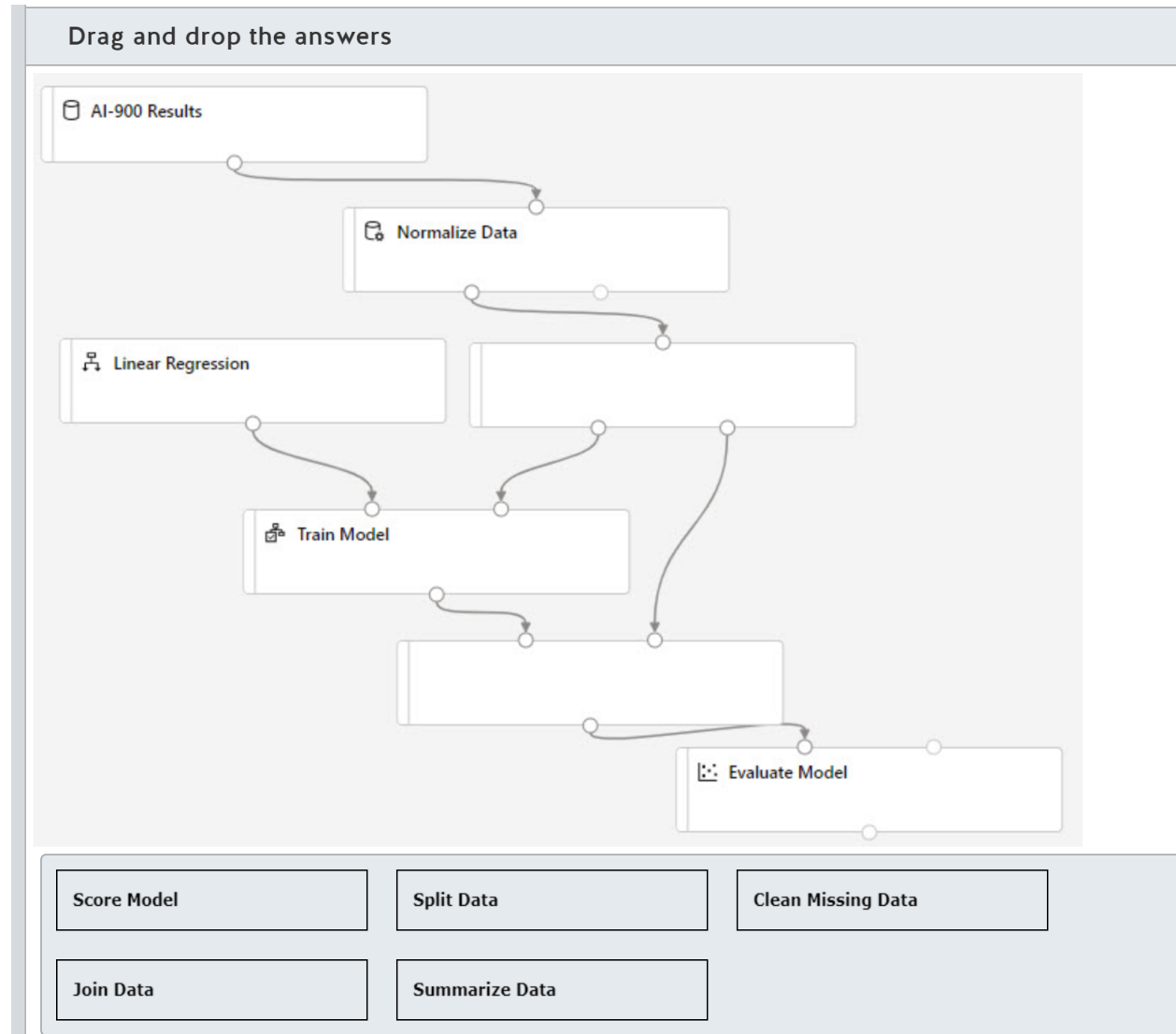
The Azure Machine Learning studio can create models using C# and .NET.	<input type="radio"/>	<input type="radio"/>
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Question 75: For each of the following statements, select Yes if the statement is true. Otherwise, select No.

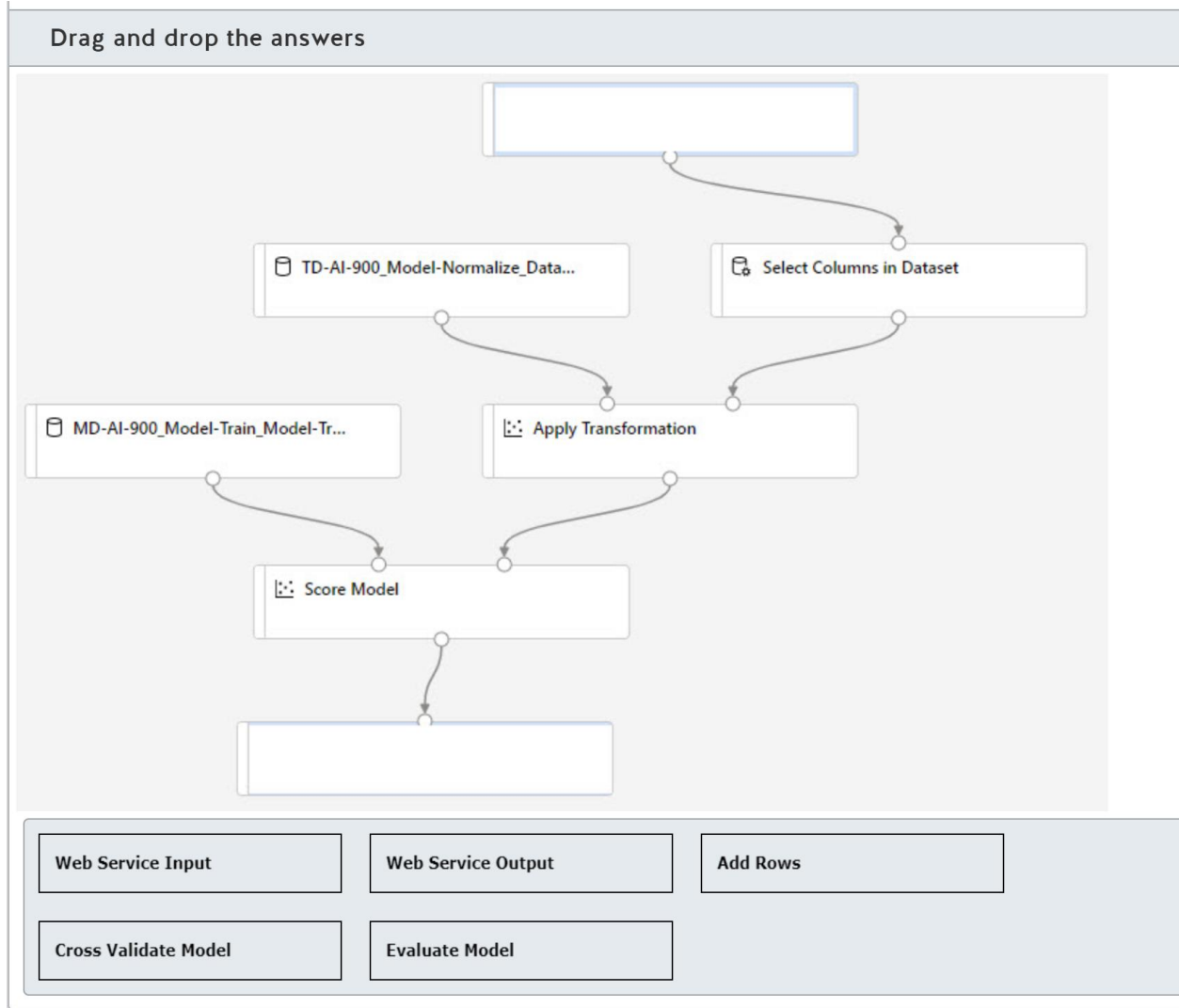
Statement	Yes	No
Automated machine learning (AutoML) can train and tune a classification model.	<input type="radio"/>	<input type="radio"/>
Automated machine learning (AutoML) can train and tune a clustering model.	<input type="radio"/>	<input type="radio"/>
Automated machine learning (AutoML) can train and tune a regression model.	<input type="radio"/>	<input type="radio"/>



Question 76: You create a training pipeline in Azure Machine Learning designer. You need to complete the pipeline. Which modules should you use to complete the pipeline? To answer, drag the appropriate module to the relevant slots. A module may be used once, more than once, or not at all.



Question 77: You create a real-time inference pipeline from a training pipeline in Azure Machine Learning designer. You need to complete the inference pipeline. Which modules should you use to complete the pipeline? To answer, drag the appropriate module to the relevant slots. A module may be used once, more than once, or not at all.



Describe features of computer vision workloads on Azure

Identify common types of computer vision solution

Question 78

Question 78: Match the Computer Vision solution to a scenario.

Scenario	Computer Vision solution
Returning bounding box coordinates for all identified animals in a photo	
Pixel-level classification of an image content	
Retrieval of printed text from a scanned document	

Object detection

Semantic segmentation

Optical Character Recognition

Facial detection

To answer, drag the appropriate computer vision solution to each relevant scenario. A computer vision solution may be used once, more than once, or not at all.

Question 79

Question 79: To complete the following sentence, select the appropriate option from the drop-down menu.

Choose the correct options

Assessing the damage to a vehicle from a photograph is an example of

- Image classification
- Object detection
- Special character recognition
- Semantic segmentation

Question 80: For which two of these requirements should you use object detection? Each correct answer presents a complete solution.

Choose the correct answers

- Detecting the color scheme
- Identifying individual objects
- Associating each pixel in the image with a label
- Identifying the location of visual features
- Identifying people

Question 81: In which of the following scenarios would you use semantic segmentation?

Choose the correct answer

- Tagging famous people in an image gallery
- Quality control on a manufacturing line
- Driving autonomous vehicles
- Recognizing customers in a retail store

Question 82: Which of the following is a scenario where you would need to use an optical character recognition solution?

Choose the correct answer

- Validating identity for access to business premises
- Processing and validating invoices
- Evaluating compliance with building safety regulations
- Identifying products in a warehouse location

Question 83: For each of the following statements about facial detection, select Yes if the statement is true. Otherwise, select No.

Statement	Yes	No
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Facial detection can determine whether a person is wearing glasses.	<input type="radio"/>	<input type="radio"/>
Facial detection requires a full-frontal image.	<input type="radio"/>	<input type="radio"/>
Facial detection can determine the emotion of a person.	<input type="radio"/>	<input type="radio"/>

Question 84: Match the computer vision type to the scenario. To answer, drag the appropriate type to each scenario. A type may be used once, more than once, or not at all.

Drag and drop the answers

Drag and drop the answers

Confirm that a driver is looking at the road whilst driving a vehicle.

Perform medical diagnosis on MRI scans.

Find people wearing face masks in a room.

Face detection

Image classification

Object detection

Optical character recognition

Question 85: Match the Computer Vision solution to a scenario. To answer, drag the appropriate computer vision solution to each relevant scenario. A Computer Vision solution may be used once, more than once, or not at all.

Drag and drop the answers

Scenario	Computer Vision solution
Retrieval of handwritten text from a student's essay	
Identification of human faces on security camera's video stream	
Returning bounding box coordinates for all identified people on a picture	

Facial detection

Object detection

Optical Character Recognition

Semantic segmentation

Question 86: To complete the following sentence, select the appropriate option from the drop-down menu.

Choose the correct options

\_\_\_\_\_ is a process of applying class or category labels to images according to

their visual characteristics.

Image classification

Object detection

Named entity recognition (NER)

Question 87: For each of the following statements about facial detection, select Yes if the statement is true. Otherwise, select No.

Statement	Yes	No
Photos taken at an extreme face angle can positively affect the facial detection process.	<input type="radio"/>	<input type="radio"/>

Wearing sunglasses can negatively affect the facial detection process.	<input type="radio"/>	<input type="radio"/>
A slower shutter speed of the video camera improves performance of the facial detection solution.	<input type="radio"/>	<input type="radio"/>

Question 88: Which scenario is an example of the use of Optical Character Recognition (OCR)?

Choose the correct answer

- Detecting people and animals on a video feed of a security camera
- Extracting handwritten text from the scanned copies of cheques
- Recognizing speakers from audio recordings
- Detecting abnormalities in a device telemetry

Question 89: Which scenario is an example of the use of object detection?

Choose the correct answer

- Finding answers on customer's questions in a bot dialog screen
- Tracking seasonal migration of animals from drone camera images
- Verifying employees based on their voices
- Extracting address details from scanned postal envelopes

Identify Azure tools and services for computer vision tasks

Question 90: For each of the following statements about the Computer Vision service, select Yes if the statement is true. Otherwise, select No.

Statement	Yes	No
The Computer Vision service can moderate adult content.	<input type="radio"/>	<input type="radio"/>
The Computer Vision service can extract printed or handwritten text from images.	<input type="radio"/>	<input type="radio"/>

The Computer Vision service can translate text in an image.	<input type="radio"/>	<input type="radio"/>
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Question 91: Which two project types can you choose in the Custom Vision service? Each correct answer presents a complete solution.

Choose the correct answers

Semantic segmentation  
Facial Recognition  
Object Detection  
Classification  
K-Means Clustering

Question 92: Match the requirement to the service. To answer, drag the appropriate service to each scenario. A service may be used once, more than once, or not at all.

Drag and drop the answers

Drag and drop the answers

Allows you to specify the labels for an image	<div></div>
Allows you to detect the angle of a head in an image	<div></div>
Identifies landmarks in an image	<div></div>

Computer Vision

Custom Vision

Face API

Video Indexer

Question 93: Match the requirement to the face recognition operation. To answer, drag the appropriate operation to each scenario. An operation may be used once, more than once, or not at all.

Drag and drop the answers



Drag and drop the answers

Evaluate whether two faces belong to the same person	<input type="text"/>
Extract faces that look alike from a list of faces	<input type="text"/>
Divide a set of faces based on similarities	<input type="text"/>

Question 94: Which of the following services would you use to find the recipe for a food dish in an image?

Choose the correct answer

Bing Visual Search  
Text Analytics  
Computer Vision  
Custom Vision

Question 95: To complete the following sentence, select the appropriate option from the drop-down menu.

Choose the correct options

The \_\_\_\_\_ API extracts data from a document and provides a GUI to visualize the data in a table-like format.

From Recognizer  
Computer Vision OCR  
Computer Vision Read

Question 96: You need to use Azure cognitive service to automate data extraction from scanned copies of sales receipts minimizing development efforts. What Azure cognitive service should you use?

**Choose the correct answer**

Custom Vision  
Form Recognizer  
Computer Vision  
Text Analytics

Question 97: Which two Azure cognitive services can be used to analyze faces within an image? Each correct answer presents a complete solution.

**Choose the correct answers**

Form Recognizer  
Computer Vision  
Personalizer  
Face  
Text Analytics

Question 98: You need to build a butterfly image classifier using your own set of images and labels. Which Azure cognitive service should you use?

**Choose the correct answer**

Video Indexer  
Custom Vision  
Computer Vision  
Bing Image Search

Question 99: For each of the following statements about Form Recognizer, select Yes if the statement is true. Otherwise, select No.

Statement	Yes	No
Prebuilt business card model can extract information from business cards in English.	<input type="radio"/>	<input type="radio"/>
Prebuilt receipt model can extract information from sales receipts in French.	<input type="radio"/>	<input type="radio"/>
Custom model can be trained to extract information from custom forms in Spanish.	<input type="radio"/>	<input type="radio"/>

Question 100: Match the Azure service to a scenario. To answer, drag the appropriate Azure service to each use case scenario. An Azure service may be used once, more than once, or not at all.

Drag and drop the answers

Drag and drop the answers	
Scenario	Azure service
Extract people's contact details from photocopies of their business cards	
Identify commercial brands on social media image posts	
Detect head gestures in real time	

Form Recognizer

Computer Vision

Face

Language Understanding (LUIS)

Question 101: You need to identify dominant colors in online images to check if they influence the popularity of the featured products. Which Azure cognitive service should you use?

Choose the correct answer

- Form Recognizer
- Personalizer
- Computer Vision
- Custom Vision

Describe features of Natural Language Processing (NLP) workloads on Azure

Identify features of common NLP Workload Scenarios

Question 102: For each of the following statements about natural language processing, select Yes if the statement is true. Otherwise, select No.

Statement	Yes	No
Key phrase extraction performs better on smaller amounts of text.	<input type="radio"/>	<input type="radio"/>

Sentiment analysis performs better on smaller amounts of text.	<input type="radio"/>	<input type="radio"/>
Speech Synthesis Markup Language (SSML) is based on JSON format.	<input type="radio"/>	<input type="radio"/>

Question 103:

For each of the following statements about Sentiment Analysis, select Yes if the statement is true. Otherwise, select No.

Statement	Yes	No
Sentiment Analysis returns sentiment labels and scores for the entire document.	<input type="radio"/>	<input type="radio"/>
Sentiment Analysis returns sentiment labels and scores for each sentence within a document.	<input type="radio"/>	<input type="radio"/>
Confidence scores range from -1 to 1.	<input type="radio"/>	<input type="radio"/>

Question 104: AI solution identifies the main points in a set of blog posts. Which Natural Language Processing (NLP) workload is this an example of?

Choose the correct answer

- Sentiment analysis
- Named entity recognition
- Key phrase extraction
- Speech recognition

Question 105: AI solution processes customer feedback and classifies it as positive, neutral, or negative. Which Natural Language Processing (NLP) workload is this an example of?

Choose the correct answer

Sentiment analysis  
Speech translation  
Named entity recognition  
Speech synthesis

Question 106: Match the natural language processing (NLP) workload to a scenario. To answer, drag the appropriate NLP workload to each relevant scenario. An NLP workload may be used once, more than once, or not at all.

Drag and drop the answers

Scenario	NLP workload
Classification of social media tweets as positive or negative	
Real-time transcription of podcast dialogs into text	
Conversion of text to speech for people with disabilities	

Sentiment analysis

Speech recognition

Speech synthesis

Speech translation

Question 107: To complete the sentence, select the appropriate option from the drop-down menu.

Choose the correct options

\_\_\_\_\_ is the ability to identify different entities in a text and categorize them into predefined classes or types. I

Language detection  
Named entity recognition  
Speech translation

Question 108: To complete the following sentence, select the appropriate option from the drop-down menu.

Choose the correct options

Creating tags of popular mentions in reviews on a website is an example of

Entity recognition

Key phrase extraction

Sentiment analysis

Question 109: Which two of the following can be found in a text document by using entity recognition? Each correct answer presents a complete solution.

Choose the correct answers

Dates and times of a day

Intent and actions

Passport number

Main talking points

Emotion expressed

Question 110: Which requirement would require you to use sentiment analysis?

Choose the correct answer

Find the use of brand names in documents.

Extract brand information from documents.



Transcribe the recording of a marketing presentation into text.

Analyze social media for a brand.

Question 111:

For each of the following statements about language modeling, select Yes if the statement is true. Otherwise, select No.

Statement	Yes	No
Language modeling can determine the emotion in a text statement.	<input type="radio"/>	<input type="radio"/>
Language modeling can discover the meaning in a text statement.	<input type="radio"/>	<input type="radio"/>

Language modeling can detect the language the text is written in.		
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Question 112: To complete the following sentences, select the appropriate options from the drop-down menus.

Choose the correct options

Detecting and interpreting spoken input is an example of **A**

Generating spoken output is an example of **B**

A)

1. Optical character recognition (OCR)
2. Speech recognition
3. Speech synthesis
4. Translation

B)

5. Optical character recognition (OCR)
6. Speech recognition
7. Speech synthesis
8. Translation

Question 113: Which two of these sources can you translate from one language into another?  
Each correct answer presents a complete solution.

Choose the correct answers

Handwriting  
Video  
Speech  
Image  
Text

Question 114: Match the natural language processing workload to a scenario. To answer, drag the appropriate workload to each scenario. A workload may be used once, more than once, or not at all.

Drag and drop the answers

**Drag and drop the answers**

Convert a command into smart actions.	<div></div>
Create a transcript of a phone call.	<div></div>
Mine customer opinions.	<div></div>

Language modeling

Sentiment analysis

Speech recognition

Entity recognition

Key phrase extraction

Translation

## Identify Azure tools and services for NLP workloads

Question 115: You need to build an AI solution that can identify and disambiguate entities in your input texts using Wikipedia as its knowledge base. What Azure cognitive service should you use?

### Choose the correct answer

Custom Vision  
Bing Autosuggest  
Form Recognizer  
Text Analytics

Question 116: You need to build an AI solution that can determine the broader meaning of a user's intentions from their utterances. Which Azure cognitive service should you use?

### Choose the correct answer

Form Recognizer  
Language Understanding Intelligence Service (LUIS)  
Bing Local Business Search  
Text Translator

Question 117: You need to enhance your chat application's functionality to enable English to Korean translation in near real-time. Which Azure cognitive service should you use?

### Choose the correct answer

Text Translator  
Language Understanding Intelligence Service (LUIS)  
Form Recognizer  
Speech Translator

Question 118: Move the appropriate Azure service to the answer area to match it with the relevant use in each scenario. An Azure service may be used once, more than once, or not at all.

### Drag and drop the answers



Drag and drop the answers

Scenario	Azure service
Enabling multilingual user experience on your corporate Web site	
Finding out whether customers like your products from their online posts	
Verifying and identifying speakers by their unique voice characteristics	

Speech

Text Analytics

Text Translator

Form Recognizer

Question 119: Move the appropriate Azure service to the answer area to match it with the relevant use in each scenario. An Azure service may be used once, more than once, or not at all.

Drag and drop the answers

Drag and drop the answers

Scenario	Azure service
Determine whether the occurrence of the word Mustang refers to a feral horse or the model of a car	
Create a custom and unique voice font for your mobile app.	
Enhance a chatbot's functionality to predict the overall meaning from a user's conversational text.	

Speech

Text Analytics

Language Understanding (LUIS)

Custom Vision

Question 120: For each of the following statements, select Yes if the statement is true. Otherwise, select No.

Statement	Yes	No
-----------	-----	----

To use the Speech service, you need to build a custom speech model.	<input type="radio"/>	<input type="radio"/>
The Speech service can transcribe audio streams in real time.	<input type="radio"/>	<input type="radio"/>
The Speech service can transcribe audio files asynchronously.	<input type="radio"/>	<input type="radio"/>

Question 121: Which two Azure cognitive services can you combine to recognize intents in voice commands? Each correct answer presents part of the solution.

Choose the correct answers

Language Understanding  
Text Translator  
Speaker Recognition  
Form Recognizer  
Speech

Question 122: For each of the following statements about the Azure Cognitive Services Text Analytics service, select Yes if the statement is true. Otherwise, select No.

Statement	Yes	No
The results from the Key Phrases operation in Text Analytics includes a confidence score between 0 and 1.	<input type="radio"/>	<input type="radio"/>
The Text Analytics API can be used with C#.	<input type="radio"/>	<input type="radio"/>

Text Analytics can be used by Power App canvas apps to analyze text.		
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Question 123: What information do you need to use in a published Language Understanding model to find the meaning in a text statement?

Choose the correct answer

Endpoint and key of a Text Analytics resource

Subscription ID and resource ID of a Language Understanding Intelligence Service (LUIS) resource

App Id, Authoring endpoint and Authoring key of a Language Understanding Intelligence Service (LUIS) app

App Id, Prediction endpoint and Prediction key of a Language Understanding Intelligence Service (LUIS) app

Question 124: Match the requirement to a Speech service API. To answer, drag the appropriate API to each requirement. An API may be used once, more than once, or not at all.

Drag and drop the answers

Drag and drop the answers

Transcription of large volumes of speech audio held in Azure Blob Storage

Conversion of a voice from one language into another in real-time

Creation of a custom voice for conversion of text into synthesized speech

Speech-to-Text

Speech Translation

Text-to-Speech

Speaker Recognition

Voice Assistant

Question 125: To complete the following sentence, select the appropriate option from the drop-down menu.

Choose the correct options

When building a Language Understanding Intelligence Service (LUIS) app, example must be added to Intents.

Entities

Features

Utterances

Question 126: Match the requirement to a Language Understanding Intelligence Service (LUIS) prebuilt model type. To answer, drag the appropriate prebuilt model to each requirement. A prebuilt model may be used once, more than once, or not at all.

Drag and drop the answers

**Drag and drop the answers**

Extract temperature information.

Control smart devices in the home.

Confirm a task.

Domain

Entity

Intent

Question 127: For each of the following statements about the Translator service, select Yes if the statement is true. Otherwise, select No.

Statement	Yes	No
-----------	-----	----

The Translator service uses Statistical Machine Translation (SMT) technology.	<input type="radio"/>	<input type="radio"/>
The Translator service can simultaneously translate from one language into multiple other languages.	<input type="radio"/>	<input type="radio"/>
The Translator service supports translation into language variants such as French and Canadian French.	<input type="radio"/>	<input type="radio"/>

## Describe features of conversational AI workloads on Azure

### Identify common use cases for conversational AI

Question 128: A customer calling a support line number gets an AI-generated voice prompt with options to choose from. Which conversational AI is this an example of?

#### Choose the correct answer

- Telephone voice menu
- Webchat bot
- Personal digital assistant

Question 129: An app is embedded in a travel site to interact with online customers and help with the real-time booking of their trips. Which conversational AI is this an example of?

#### Choose the correct answer

- Webchat bot
- Telephone voice menu
- Personal digital assistant

Question 130: To complete the following sentence, select the appropriate option from the drop-down menu.

#### Choose the correct options

Answering frequently asked questions (FAQs) in a conversational manner is an example of

Object detection  
Speech recognition  
Webchat bots

Question 131: What is the most common use of a bot?

Choose the correct answer

Identifying the main points in a document uploaded by a customer  
Interpreting an image uploaded by a customer  
Prioritizing customer emails by performing statistical analysis of the email's content  
Providing first-line automated customer service to customers across multiple channels

Question 132: In which two scenarios could you use a bot? Each correct answer presents a complete solution.

Choose the correct answers

Assembly of vehicles on a production line  
Customer online ordering  
Autonomous vehicles  
Human Resources-related questions from an employee

Question 133: To complete the following sentence, select the appropriate option from the drop-down menu.

Choose the correct options

is an example of providing guided customer support over  
Skype with conversational AI.

Personal digital assistant

Telephone voice menu

Web chat

Question 134: For each of the following statements about personal digital assistants, select Yes if the statement is true. Otherwise, select No.

Statement	Yes	No
A personal digital assistant has knowledge of a user's needs and preferences.	<input type="radio"/>	<input type="radio"/>
A personal digital assistant acts on a user's behalf to perform intelligent actions.	<input type="radio"/>	<input type="radio"/>
A personal digital assistant has text only responses.	<input type="radio"/>	<input type="radio"/>

Question 135: Match the conversational AI workload to the scenario. To answer, drag the appropriate workload to each scenario. A workload may be used once, more than once, or not at all.

Drag and drop the answers

**Drag and drop the answers**

Schedule meetings and appointments

Travel reservations and bookings

Capturing feedback after an interaction with a call center

Personal digital assistant

Telephone voice menu

Web chat

Question 136: An AI solution on your smartphone can understand your voice command and send text messages while you drive a car. Which conversational AI is this an example of?

**Choose the correct answer**

Telephone voice menu  
Personal digital assistant  
Webchat bot

Question 137: To complete the sentence, select the appropriate option from the drop-down menu.

**Choose the correct options**

\_\_\_\_\_ is a conversational AI solution that keeps users informed and productive, helping them get things done across devices and platforms.

Telephone voice menu  
Personal digital assistant  
Webchat bot

Question 138: Match the conversational AI solution to a scenario. To answer, drag the appropriate conversational AI solution to each relevant scenario. A conversational AI solution may be used once, more than once, or not at all.

**Drag and drop the answers**



Drag and drop the answers

Scenario	Conversational AI Solution
An interactive component on a banking site that understands a client's requirements and provides general answers.	
An intelligent application that checks your calendar to automatically accept e-meeting invitations.	
An interactive response system that transfers calls to required employee numbers.	

Personal digital assistant (PDA)

Telephone voice menu

Webchat bot

Question 139: For each of the following statements about a telephone voice menu, select Yes if the statement is true. Otherwise, select No.

Statement	Yes	No
The caller can interact with a telephone voice menu via the phone keypad.	<input type="radio"/>	<input type="radio"/>
The caller can interact with a telephone voice menu via speech recognition.	<input type="radio"/>	<input type="radio"/>
The caller needs to know the recipient's extension number to get connected.	<input type="radio"/>	<input type="radio"/>

Identify Azure services for conversational AI

Question 140: In which two ways could you natively populate a QnA Maker knowledge base?  
Each correct answer presents a complete solution.

Choose the correct answers

- Using a SharePoint list
- Using a SQL database

Using a PDF document

Manually adding question and answer pairs

Question 141: Which two Azure resources are created when a new QnA Maker service is created? Each correct answer presents part of the solution.

Choose the correct answers

Azure Key Vault

Web App Bot

App Service

Azure Cognitive Search

Question 142: Which file format do you use for uploading a chat personality to a QnA Maker knowledge base?

Choose the correct answer

XLS

PDF

CSV

TSV

Question 143: Match the Azure Bot Service tool to the requirement. To answer, drag the appropriate tool to each requirement. A tool may be used once, more than once, or not at all.

Drag and drop the answers

Drag and drop the answers	
Develop a bot using code.	<div></div>
Debug a bot.	<div></div>
Get started building a bot by using fully functional samples.	<div></div>

Azure Bot Emulator	Bot Service templates	Bot Framework SDK
Bot Framework CLI tools	Bot Framework Composer	

Question 144: To complete the following sentence, select the appropriate option from the drop-down menu.

Choose the correct options

A \_\_\_\_\_ is added to make a bot available on a different platform.

Channel

Skill

turn

Question 145: For each of the following statements about Azure Bot Services, select Yes if the statement is true. Otherwise, select No.

Statement	Yes	No
A bot created with the Azure Bot Framework SDK can be integrated with Language Understanding (LUIS).	<input type="radio"/>	<input type="radio"/>
A bot created with the Azure Bot Framework SDK can be integrated with QnA Maker.	<input type="radio"/>	<input type="radio"/>
A bot created with the Azure Bot Framework SDK can be integrated with Power Virtual Agents.	<input type="radio"/>	<input type="radio"/>

Question 146: For each of the following statements about the QnA Maker knowledge base, select Yes if the statement is true. Otherwise, select No.

Statement	Yes	No
-----------	-----	----

The QnA Maker app can only use one knowledge base.	<input type="radio"/>	<input type="radio"/>
A knowledge base supports multiple languages.	<input type="radio"/>	<input type="radio"/>
A knowledge base consists of question and answer pairs.	<input type="radio"/>	<input type="radio"/>

Question 147: Match each Azure resource to a purpose. To answer, drag the appropriate Azure resource to each purpose within the QnA Maker app. An Azure resource may be used once, more than once, or not at all.

Drag and drop the answers

Purpose	Azure resource
Authoring and query prediction	
Query prediction telemetry	
Data storage and search	

Application Insights

Cognitive Search

QnA Maker

App Service

Question 148: Which two Azure cognitive services should you combine so that your chatbot can determine user's intentions and find answers from a custom knowledge base? Each correct answer presents part of the solution.

**Choose the correct answers**

QnA Maker  
Language Understanding Intelligence Service (LUIS)  
Text Translator  
Speaker Recognition  
Form Recognizer

Question 149: For each of the following statements about skills in the Bot Framework, select Yes if the statement is true. Otherwise, select No.

Statement	Yes	No
A skill is a bot.	<input type="radio"/>	<input checked="" type="radio"/>
A skill manifest is an XML file.	<input type="radio"/>	<input type="radio"/>
Users can interact with a root bot.	<input type="radio"/>	<input type="radio"/>

Question 150: Which channel is automatically configured for a bot that was created with the Framework Bot Service?

**Choose the correct answer**

Skype  
Email  
Microsoft Teams  
Web Chat

Question 151: For each of the following statements about Bot Framework Composer, select Yes if the statement is true. Otherwise, select No.

Statement	Yes	No
Composer is an open source solution.	<input type="radio"/>	<input type="radio"/>
Composer is a command line program.	<input type="radio"/>	<input type="radio"/>
Composer can publish bots to Azure Web App and Azure Functions.	<input type="radio"/>	<input type="radio"/>