

# AI Fundamentals Q&A Summary



Here is that content, structured by topic for easier review.



## Core AI Workloads

This section covers Computer Vision, Natural Language Processing, and Knowledge Mining.

### Computer Vision

**Question 2:** Which type of artificial intelligence (AI) workload provides the ability to generate bounding boxes that identify the locations of different types of vehicles in an image?

- **Correct Answer:** object detection
- **Explanation:** Object detection provides the ability to generate bounding boxes identifying the locations of different types of vehicles in an image. The other answer choices also process images, but their outcomes are different.  
Understand computer vision - Training | Microsoft Learn

**Question 3:** Which type of artificial intelligence (AI) workload provides the ability to classify individual pixels in an image depending on the object that they represent?

- **Correct Answer:** semantic segmentation
- **Explanation:** Semantic segmentation provides the ability to classify individual pixels in an image depending on the object that they represent. The other answer choices also process images, but their outcomes are different.  
Understand computer vision - Training | Microsoft Learn

**Question 23:** Which two specialized domain models are supported by Azure AI Vision when categorizing an image? Each correct answer presents a complete solution.



- **Correct Answer:**
  - celebrities
  - landmarks
- **Explanation:** When categorizing an image, the Azure AI Vision service supports two specialized domain models: celebrities and landmarks. Image types is an additional capability of the computer vision service, allowing it to detect the type of image, such as a clip art image or a line drawing. Both people\_ and people\_group are supported categories when performing image classification. Get started with image analysis on Azure - Training | Microsoft Learn

**Question 24:** Which process allows you to use optical character recognition (OCR)?

- **Correct Answer:** digitizing medical records
- **Explanation:** OCR can extract printed or handwritten text from images. In this case, it can be used to extract text from scanned medical records to produce a digital archive from paper-based documents. Identifying wildlife in an image is an example of a computer vision solution that uses object detection and is not suitable for OCR. Identifying a user requesting access to a laptop is done by taking images from the laptop's webcam and using facial detection and recognition to identify the user requesting access. Translating speech to text is an example of using speech translation and uses the Azure AI Speech service as part of Azure AI Services. Read text with the Computer Vision service - Training | Microsoft Learn

**Question 25:** Which process allows you to use object detection?

- **Correct Answer:** tracking livestock in a field
- **Explanation:** Object detection can be used to track livestock animals, such as cows, to support their safety and welfare. For example, a farmer can track whether a particular animal has not been mobile. Sentiment analysis is used to return a numeric value based on the analysis of a text. Employee access to a secure building can be achieved by using facial recognition. Extracting text from manuscripts is an example of a computer vision solution that uses optical

character recognition (OCR). Machine learning for computer vision - Training | Microsoft Learn

**Question 26:** Which three parts of the machine learning process does the Azure AI Vision eliminate the need for? Each correct answer presents part of the solution.

- **Correct Answer:**
  - choosing a model
  - evaluating a model
  - training a model
- **Explanation:** The computer vision service eliminates the need for choosing, training, and evaluating a model by providing pre-trained models. To use computer vision, you must create an Azure resource. The use of computer vision involves inferencing. Machine learning for computer vision - Training | Microsoft Learn

**Question 27:** Which analytical task of the Azure AI Vision service returns bounding box coordinates?

- **Correct Answer:** object detection
- **Explanation:** Detecting objects identifies common objects and, for each, returns bounding box coordinates. Image categorization assigns a category to an image, but it does not return bounding box coordinates. Tagging involves associating an image with metadata that summarizes the attributes of the image, but it does not return bounding box coordinates. OCR detects printed and handwritten text in images, but it does not return bounding box coordinates. Get started with image analysis on Azure - Training | Microsoft Learn

**Question 28:** Which two prebuilt models allow you to use the Azure AI Document Intelligence service to scan information from international passports and sales accounts? Each correct answer presents part of the solution.

- **Correct Answer:**
  - ID document model

- invoice model
- **Explanation:** The invoice model extracts key information from sales invoices and is suitable for extracting information from sales account documents. The ID document model is optimized to analyze and extract key information from US driver's licenses and international passport biographical pages. The business card model, receipt model, and language model are not suitable to extract information from passports or sales account documents. Analyze receipts with the Form Recognizer service - Training | Microsoft Learn  
Document processing models - Form Recognizer - Azure Applied AI Services | Microsoft Learn

**Question 29:** Which two Azure AI Document Intelligence models include identifying common data fields as part of its data extraction capabilities? Each correct answer presents a complete solution.

- **Correct Answer:**
  - business card model
  - invoice model
- **Explanation:** The business card model analyzes and extracts key information from business card images and includes common data field extractions, such as name and email. The invoice model extracts key information from sales invoices and includes common data fields used in invoices for extraction. The read model, layout model, and general document model do not identify and extract common data fields. Document processing models - Form Recognizer - Azure Applied AI Services | Microsoft Learn Analyze receipts with the Form Recognizer service - Training | Microsoft Learn

**Question 30:** When using the Face Detect API of the Azure AI Face service, which feature helps identify whether a human face has glasses or headwear?

- **Correct Answer:** face attributes
- **Explanation:** Face attributes are a set of features that can be detected by the Face Detect API. Attributes such as accessories (glasses, mask, headwear etc.) can be detected. Face rectangle, face ID, and face landmarks do not allow you to determine whether a person is wearing glasses or headwear. What is the

Azure Face service? - Azure Cognitive Services | Microsoft Learn  
Detect and analyze faces with the Face service - Training | Microsoft Learn

**Question 31:** When using the Azure AI Face service, what should you use to perform one-to-many or one-to-one face matching? Each correct answer presents a complete solution.

- **Correct Answer:**
  - face identification
  - face verification
- **Explanation:** Face identification in the Azure AI Face service can address one-to-many matching of one face in an image to a set of faces in a secure repository. Face verification has the capability for one-to-one matching of a face in an image to a single face from a secure repository or a photo to verify whether they are the same individual. Face attributes, the find similar faces operation, and Azure AI Custom Vision do not verify the identity of a face.  
What is the Azure Face service? - Azure Cognitive Services | Microsoft Learn  
Detect and analyze faces with the Face service - Training | Microsoft Learn

**Question 32:** Which service can you use to train an image classification model?

- **Correct Answer:** Azure AI Custom Vision
- **Explanation:** Azure AI Custom Vision is an image recognition service that allows you to build and deploy your own image models. The Azure AI vision service, Azure AI Face service, and Azure AI Language service do not provide the capability to train your own image model.  
What is Custom Vision? - Azure Cognitive Services | Microsoft Learn  
Understand Text Analytics - Training | Microsoft Learn

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## Natural Language Processing (NLP)

**Question 1:** Which natural language processing (NLP) workload is used to generate closed caption text for live presentations?

- **Correct Answer:** Azure AI Speech
- **Explanation:** Azure AI Speech provides speech-to-text and text-to-speech capabilities through speech recognition and synthesis. You can use prebuilt and custom Speech service models for a variety of tasks, from transcribing audio to text with high accuracy, to identifying speakers in conversations, creating custom voices, and more. Understand Text Analytics - Training | Microsoft Learn

**Question 5:** Which artificial intelligence (AI) workload scenario is an example of natural language processing (NLP)?

- **Correct Answer:** extracting key phrases from a business insights report
- **Explanation:** Extracting key phrases from text to identify the main terms is an NLP workload. Predicting whether customers are likely to buy a product based on previous purchases requires the development of a machine learning model. Monitoring for sudden increases in quantity of failed sign-in attempts is a different workload. Identifying objects in landscape images is a computer vision workload. Analyze text with the Language service - Training | Microsoft Learn

**Question 6:** Which two artificial intelligence (AI) workload scenarios are examples of natural language processing (NLP)? Each correct answer presents a complete solution.

- **Correct Answer:**
  - performing sentiment analysis on social media data
  - translating text between different languages from product reviews
- **Explanation:** Translating text between different languages from product reviews is an NLP workload that uses the Azure AI Translator service and is part of Azure AI Services. It can provide text translation of supported languages in real time. Performing sentiment analysis on social media data is an NLP that uses the sentiment analysis feature of the Azure AI Service for Language. It can provide sentiment labels, such as negative, neutral, and positive for text-based sentences and documents. Microsoft Azure AI Fundamentals: Explore natural language processing - Training | Microsoft Learn

**Question 33:** Which natural language processing (NLP) technique normalizes words before counting them?

- **Correct Answer:** stemming
- **Explanation:** Stemming normalizes words before counting them. Frequency analysis counts how often a word appears in a text. N-grams extend frequency analysis to include multi-term phrases. Vectorization captures semantic relationships between words by assigning them to locations in n-dimensional space. Understand Text Analytics - Training | Microsoft Learn

**Question 34:** Which natural language processing (NLP) technique assigns values to words such as plant and flower, so that they are considered closer to each other than a word such as airplane?

- **Correct Answer:** vectorization
- **Explanation:** Vectorization captures semantic relationships between words by assigning them to locations in n-dimensional space. Lemmatization, also known as stemming, normalizes words before counting them. Frequency analysis counts how often a word appears in a text. N-grams extend frequency analysis to include multi-term phrases. Understand Text Analytics - Training | Microsoft Learn

**Question 35:** What is the confidence score returned by the Azure AI Language detection service of natural language processing (NLP) for an unknown language name?

- **Correct Answer:** NaN
- **Explanation:** NaN, or not a number, designates an unknown confidence score. Unknown is a value with which the NaN confidence score is associated. The score values range between 0 and 1, with 0 designating the lowest confidence score and 1 designating the highest confidence score. Get started with text analysis - Training | Microsoft Learn

**Question 36:** Which two Azure AI Services features can be used to enable both text-to-text and speech-to-text between multiple languages? Each correct answer presents part of the solution.

- **Correct Answer:**
  - the Speech service
  - the Translator service
- **Explanation:** The Azure AI Speech service can be used to generate spoken audio from a text source for text-to-speech translation. The Azure AI Translator service directly supports text-to-text translation in more than 60 languages. Key phrase extraction, Conversational Language Understanding, and language detection are not used for language translation for text-to-text and speech-to-text translation. Translate text and speech - Training | Microsoft Learn Azure Cognitive Services Translator documentation - quickstarts, tutorials, API reference - Azure Cognitive Services | Microsoft Learn

**Question 37:** Which two features of Azure AI Services allow you to identify issues from support question data, as well as identify any people and products that are mentioned? Each correct answer presents part of the solution.

- **Correct Answer:**
  - key phrase extraction
  - named entity recognition
- **Explanation:** Key phrase extraction is used to extract key phrases to identify the main concepts in a text. It enables a company to identify the main talking points from the support question data and allows them to identify common issues. Named entity recognition can identify and categorize entities in unstructured text, such as people, places, organizations, and quantities. The Azure AI Speech service, Conversational Language Understanding, and Azure AI Bot Service are not designed for identifying key phrases or entities. Key Phrase Extraction cognitive skill – Azure Cognitive Search | Microsoft Learn Extract insights from text with the Language service – Training | Microsoft Learn Analyze text with the Language service – Training | Microsoft Learn

**Question 38:** Which three values are returned by the language detection feature of the Azure AI Language service in Azure?

- **Correct Answer:**





- ISO 6391 Code
- Language Name
- Score
- **Explanation:** Language Name, ISO 6391 Code, and Score are three values returned by the Language service of natural language processing (NLP) in Azure. Bounding box coordinates are returned by the Azure AI Vision services in Azure. Wikipedia URL is one of potential values returned by entity linking of entity recognition. Get started with text analysis - Training | Microsoft Learn

**Question 39:** Which feature of the Azure AI Translator service is available only to Custom Translator?

- **Correct Answer:** model training with a dictionary
- **Explanation:** Model training with a dictionary can be used with Custom Translator when you do not have enough parallel sentences to meet the 10,000 minimum requirements. The resulting model will typically complete training much faster than with full training and will use the baseline models for translation along with the dictionaries you have added. What is Custom Translator? - Azure Cognitive Services | Microsoft Learn Introduction to Translator - Training | Microsoft Learn

**Question 40:** When using the Azure AI Service for Language, what should you use to provide further information online about entities extracted from a text?

- **Correct Answer:** entity linking
- **Explanation:** Entity Linking identifies and disambiguates the identity of entities found in a text. Key phrase extraction is not used to extract entities and is used instead to extract key phrases to identify the main concepts in a text. Named entity recognition cannot provide a link for each entity to view further information. Text translation is part of the Azure AI Translator service. What is entity linking in Azure Cognitive Service for Language? - Azure Cognitive Services | Microsoft Learn Analyze text with the Language service - Training | Microsoft Learn

**Question 41:** Which feature of the Azure AI Speech service can identify distinct user voices?

- **Correct Answer:** speech recognition
- **Explanation:** Speech recognition uses audio data to analyze speech and determine recognizable patterns that can be mapped to distinct user voices. Azure AI Speech synthesis is concerned with vocalizing data, usually by converting text to speech. Azure AI Speech translation is concerned with multilanguage translation of speech. Language identification is used to identify languages spoken in audio when compared against a list of supported languages. Speaker recognition overview - Speech service - Azure Cognitive Services | Microsoft Learn Recognize and synthesize speech - Training | Microsoft Learn

**Question 42:** Which three sources can be used to generate questions and answers for a knowledge base? Each correct answer presents a complete solution.

- **Correct Answer:**
    - a webpage
    - an existing FAQ document
    - manually entered data
  - **Explanation:** A webpage or an existing document, such as a text file containing question and answer pairs, can be used to generate a knowledge base. You can also manually enter the knowledge base question-and-answer pairs. You cannot directly use an image or an audio file to import a knowledge base. Build a bot with the Language Service and Azure Bot Service - Training | Microsoft Learn
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## Knowledge Mining

**Question 4:** Which type of artificial intelligence (AI) workload has the primary purpose of making large amounts of data searchable?

- **Correct Answer:** knowledge mining
  - **Explanation:** Knowledge mining is an artificial intelligence (AI) workload that has the purpose of making large amounts of data searchable. While other workloads leverage indexing for faster access to large amounts of data, this is not their primary purpose. Understand knowledge mining - Training | Microsoft Learn
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## Machine Learning

This section covers core machine learning concepts, models, and processes in Azure.

**Question 11:** Which type of machine learning algorithm groups observations is based on the similarities of features?

- **Correct Answer:** clustering
- **Explanation:** Clustering algorithms group data points that have similar characteristics. Regression algorithms are used to predict numeric values. Classification algorithms are used to predict a predefined category to which an input value belongs. Supervised learning is a category of learning algorithms that includes regression and classification, but not clustering. Fundamentals of machine learning - Training | Microsoft Learn What are classification models? - Training | Microsoft Learn What is clustering? - Training | Microsoft Learn

**Question 12:** Which type of machine learning algorithm assigns items to a set of predefined categories?

- **Correct Answer:** classification
- **Explanation:** Classification algorithms are used to predict a predefined category to which an input value belongs. Regression algorithms are used to predict numeric values. Clustering algorithms group data points that have

similar characteristics. Unsupervised learning is a category of learning algorithms that includes clustering, but not regression or classification. Fundamentals of machine learning - Training | Microsoft Learn What are classification models? - Training | Microsoft Learn What is clustering? - Training | Microsoft Learn

**Question 13:** An electricity utility company wants to develop a mobile app for its customers to monitor their energy use and to display their predicted energy use for the next 12 months. The company wants to use machine learning to provide a reasonably accurate prediction of future energy use by using the customers' previous energy-use data. Which type of machine learning is this?

- **Correct Answer:** regression
- **Explanation:** Regression is a machine learning scenario that is used to predict numeric values. In this example, regression will be able to predict future energy consumption based on analyzing historical time-series energy data based on factors, such as seasonal weather and holiday periods. Multiclass classification is used to predict categories of data. Clustering analyzes unlabeled data to find similarities present in the data. Classification is used to predict categories of data. Regression - Training | Microsoft Learn

**Question 14:** A retailer wants to group together online shoppers that have similar attributes to enable its marketing team to create targeted marketing campaigns for new product launches. Which type of machine learning is this?

- **Correct Answer:** clustering
- **Explanation:** Clustering is a machine learning type that analyzes unlabeled data to find similarities present in the data. It then groups (clusters) similar data together. In this example, the company can group online customers based on attributes that include demographic data and shopping behaviors. The company can then recommend new products to those groups of customers who are most likely to be interested in them. Classification and multiclass classification are used to predict categories of data. Regression is a machine learning scenario that is used to predict numeric values. Regression - Training | Microsoft Learn

**Question 15:** In a regression machine learning algorithm, what are the characteristics of features and labels in a training dataset?

- **Correct Answer:** known feature and label values
- **Explanation:** In a regression machine learning algorithm, a training set contains known feature and label values. What is regression? - Training | Microsoft Learn

**Question 16:** A company is using machine learning to predict house prices based on appropriate house attributes. For the machine learning model, which attribute is the label?

- **Correct Answer:** price of the house
- **Explanation:** The price of the house is the label you are attempting to predict through the machine learning model. This is typically done by using a regression model. Floor space size, number of bedrooms, and age of the house are all input variables for the model to help predict the house price label. Fundamentals of machine learning - Training | Microsoft Learn

**Question 17:** What is the purpose of a validation dataset used for as part of the development of a machine learning model?

- **Correct Answer:** evaluating the trained model
- **Explanation:** The validation dataset is a sample of data held back from a training dataset. It is then used to evaluate the performance of the trained model. Cleaning missing data is used to detect missing values and perform operations to fix the data or create new values. Feature engineering is part of preparing the dataset and related data transformation processes. Summarizing the data is used to provide summary statistics, such as the mean or count of distinct values in a column. Regression - Training | Microsoft Learn

**Question 18:** What should you do after preparing a dataset and before training the machine learning model?

- **Correct Answer:** split data into training and validation datasets

- **Explanation:** Splitting data into training and validation datasets leaves you with two datasets, the first and largest of which is the training dataset you use to train the model. The second, smaller dataset is the held back data and is called the validation dataset, as it is used to evaluate the trained model. If normalizing or summarizing the data is required, it will be carried out as part of data transformation. Cleaning missing data is part of preparing the data and the data transformation processes. Regression - Training | Microsoft Learn

**Question 19:** You need to use the Azure Machine Learning designer to deploy a predictive service from a newly trained model. What should you do first in the Machine Learning designer?

- **Correct Answer:** Create an inference pipeline.
- **Explanation:** To deploy a predictive service from a newly trained model by using the Machine Learning designer, you must first create a pipeline in the Machine Learning designer. Adding training modules by using the Machine Learning designer takes place before creating a trained model, which already exists. Adding a dataset by using the Machine Learning designer requires that a pipeline already exists. To create an inferencing cluster, you must use Machine Learning studio. Regression - Training | Microsoft Learn

**Question 20:** You train a regression model by using automated machine learning (automated ML) in the Azure Machine Learning studio. You review the best model summary. You need to publish the model for others to use from the internet. What should you do next?

- **Correct Answer:** Deploy the model to an endpoint.
- **Explanation:** You can deploy the best performing model for client applications to use over the internet by using an endpoint. Compute clusters are used to train the model and are created directly after you create a Machine Learning workspace. Before you can test the model's endpoint, you must deploy it first to an endpoint. Automated ML performs the validation automatically, so you do not need to split the dataset. What is automated ML? AutoML - Azure Machine Learning | Microsoft Learn Regression - Training | Microsoft Learn

**Question 21:** Which three supervised machine learning models can you train by using automated machine learning (automated ML) in the Azure Machine Learning studio? Each correct answer presents a complete solution.

- **Correct Answer:**

- Classification
- regression
- time-series forecasting

- **Explanation:** Time-series forecasting, regression, and classification are supervised machine learning models. Automated ML learning can predict categories or classes by using a classification algorithm, as well as numeric values as part of the regression algorithm, and at a future point in time by using time-series data. Inference pipeline is not a machine learning model. Clustering is unsupervised machine learning and automated ML only works with supervised learning algorithms. Fundamentals of machine learning - Training | Microsoft Learn

**Question 22:** Which three data transformation modules are in the Azure Machine Learning designer? Each correct answer presents a complete solution.

- **Correct Answer:**

- Clean Missing Data
- Normalize Data
- Select Columns in Dataset

- **Explanation:** Normalize Data is a data transformation module that is used to change the values of numeric columns in a dataset to a common scale, without distorting differences in the range of values. The Clean Missing Data module is part of preparing the data and data transformation process. Select Columns in Dataset is a data transformation component that is used to choose a subset of columns of interest from a dataset. The train clustering model is not a part of data transformation. The evaluate model is a component used to measure the accuracy of training models. Clustering - Training | Microsoft Learn

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## Responsible AI (RAI)

This section covers the principles of Responsible AI.

**Question 7:** Which principle of responsible artificial intelligence (AI) raises awareness about the limitations of AI-based solutions?

- **Correct Answer:** transparency
- **Explanation:** Transparency provides clarity regarding the purpose of AI solutions, the way they work, as well as their limitations. The privacy and security, reliability and safety, and accountability principles focus on the capabilities of AI, rather than raising awareness about its limitations.  
Understand Responsible AI - Training | Microsoft Learn Identify principles and practices for responsible AI - Training | Microsoft Learn

**Question 8:** Which principle of responsible artificial intelligence (AI) has the objective of ensuring that AI solutions benefit all parts of society regardless of gender or ethnicity?

- **Correct Answer:** inclusiveness
- **Explanation:** The inclusiveness principle is meant to ensure that AI solutions empower and engage everyone, regardless of criteria such as physical ability, gender, sexual orientation, or ethnicity. Privacy and security, reliability and safety, and accountability do not discriminate based on these criteria, but also do not emphasize the significance of bringing benefits to all parts of the society. Understand Responsible AI - Training | Microsoft Learn

**Question 9:** Which two principles of responsible artificial intelligence (AI) are most important when designing an AI system to manage healthcare data? Each correct answer presents part of the solution.

- **Correct Answer:**
  - accountability



- privacy and security
- **Explanation:** The accountability principle states that AI systems are designed to meet any ethical and legal standards that are applicable. The system must be designed to ensure that privacy of the healthcare data is of the highest importance, including anonymizing data where applicable. The fairness principle is applied to AI systems to ensure that users of the systems are treated fairly. The inclusiveness principle states that AI systems must empower people in a positive and engaging way. Understand Responsible AI - Training | Microsoft Learn

**Question 10:** Which principle of responsible artificial intelligence (AI) ensures that an AI system meets any legal and ethical standards it must abide by?

- **Correct Answer:** accountability
- **Explanation:** The accountability principle ensures that AI systems are designed to meet any ethical and legal standards that are applicable. The privacy and security principle states that AI systems must be designed to protect any personal and/or sensitive data. The inclusiveness principle states that AI systems must empower people in a positive and engaging way. The fairness principle is applied to AI system to ensure that users of the systems are treated fairly. Microsoft Azure AI Fundamentals: Explore computer vision - Training | Microsoft Learn Understand Responsible AI - Training | Microsoft Learn

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## 🌟 Generative AI (GenAI)

This section covers Generative AI models, concepts, and responsible use.

**Question 43:** Select the answer that correctly completes the sentence. [Answer choice] use plugins to provide end users with the ability to get help with common tasks from a generative AI model.

- **Correct Answer:** Copilots
- **Explanation:** Copilots are often integrated into applications to provide a way for users to get help with common tasks from a generative AI model. Copilots are based on a common architecture, so developers can build custom copilots for various business-specific applications and services. What are copilots? - Training | Microsoft Learn

**Question 44:** At which layer can you apply content filters to suppress prompts and responses for a responsible generative AI solution?

- **Correct Answer:** safety system
- **Explanation:** The safety system layer includes platform-level configurations and capabilities that help mitigate harm. For example, the Azure OpenAI service includes support for content filters that apply criteria to suppress prompts and responses based on the classification of content into four severity levels (safe, low, medium, and high) for four categories of potential harm (hate, sexual, violence, and self-harm). Responsible generative AI - Training | Microsoft Learn

**Question 45:** Select the answer that correctly completes the sentence. [Answer choice] can return responses, such as natural language, images, or code, based on natural language input.

- **Correct Answer:** Generative AI
- **Explanation:** Generative AI models offer the capability of generating images based on a prompt by using DALL-E models, such as generating images from natural language. The other AI capabilities are used in different contexts to achieve other goals. What is generative AI? - Training | Microsoft Learn

**Question 46:** As per the NIST AI Risk Management Framework, what is the first stage to consider when developing a responsible generative AI solution?

- **Correct Answer:** Identify potential harms.
- **Explanation:** Identifying potential harms is the first stage when planning a responsible generative AI solution. Responsible generative AI - Training | Microsoft Learn

**Question 47:** Which two capabilities are examples of a GPT model? Each correct answer presents a complete solution.

- **Correct Answer:**
  - Create natural language.
  - Understand natural language.
- **Explanation:** Azure OpenAI natural language models can take in natural language and generate responses. GPT models are excellent at both understanding and creating natural language. What is generative AI? - Training |T Learn

**Question 48:** Which three capabilities are examples of image generation features for a generative AI model? Each correct answer presents a complete solution.

- **Correct Answer:**
  - creating variations of an image
  - editing an image
  - new image creation
- **Explanation:** Image generation models can take a prompt, a base image, or both, and create something new. These generative AI models can create both realistic and artistic images, change the layout or style of an image, and create variations of a provided image. Fundamentals of Generative AI - Training | Microsoft Learn

**Question 49:** Which generative AI model is used to generate images based on natural language prompts?

- **Correct Answer:** DALL-E
- **Explanation:** DALL-E is a model that can generate images from natural language. GPT-4 and GPT-3.5 can understand and generate natural language and code but not images. Embeddings can convert text into numerical vector form to facilitate text similarity. Whisper can transcribe and translate speech to text. Azure OpenAI Service models - Azure OpenAI | Microsoft Learn

**Question 50:** Select the answer that correctly completes the sentence. [Answer choice] can search, classify, and compare sources of text for similarity.

- **Correct Answer:** Embeddings
- **Explanation:** Embeddings is an Azure OpenAI model that converts text into numerical vectors for analysis. Embeddings can be used to search, classify, and compare sources of text for similarity. Fundamentals of Generative AI - Training | Microsoft Learn