You are migrating workloads to the cloud. The goal of the migration is to serve customers worldwide as quickly as possible According to local regulations, certain data is required to be stored in a specific geographic area, and it can be served worldwide. You need to design the architecture and deployment for your workloads.

What should you do?

C. Select a public cloud provider that guarantees data location in the required geographic area.

Your organization needs a large amount of extra computing power within the next two weeks.

After those two weeks, the need for the additional resources will end.

Which is the most cost-effective approach?

C. Start a very powerful virtual machine without using a committed use discount

Your organization needs to plan its cloud infrastructure expenditures.

Which should your organization do?

A. Review cloud resource costs frequently, because costs change often based on use

The operating systems of some of your organization's virtual machines may have a security vulnerability.

How can your organization most effectively identify all virtual machines that do not have the latest security update?

A. View the Security Command Center to identify virtual machines running vulnerable disk images

You are currently managing workloads running on Windows Server for which your company owns the licenses. Your workloads are only needed during working hours, which allows you to shut down the instances during the weekend. Your Windows Server licenses are up for renewal in a month, and you want to optimize your license cost.

What should you do?

D. Migrate the workloads to Compute Engine with a pay-as-you-go (PAYG) model

Your organization runs a distributed application in the Compute Engine virtual machines. Your organization needs redundancy, but it also needs extremely fast communication (less than 10 milliseconds) between the parts of the application in different virtual machines.

Where should your organization locate this virtual machines?

B. In different zones within a single region

An organization decides to migrate their on-premises environment to the cloud. They need to determine which resource components still need to be assigned ownership.

Which two functions does a public cloud provider own? (Choose two.)

- A. Hardware maintenance
- D. Hardware capacity management

You are a program manager within a Software as a Service (SaaS) company that offers rendering software for animation studios. Your team needs the ability to allow scenes to be scheduled at will and to be interrupted at any time to restart later. Any individual scene rendering takes less than 12 hours to complete, and there is no service-level agreement (SLA) for the completion time for all scenes. Results will be stored in a global Cloud Storage bucket. The compute resources are not bound to any single geographical location. This software needs to run on Google Cloud in a cost-optimized way.

What should you do?

A. Deploy the application on Compute Engine using preemptible instances

Your manager wants to restrict communication of all virtual machines with internet access; with resources in another network; or with a resource outside Compute

Engine. It is expected that different teams will create new folders and projects in the near future.

How would you restrict all virtual machines from having an external IP address?

A. Define an organization policy at the root organization node to restrict virtual machine instances from having an external IP address

Your multinational organization has servers running mission-critical workloads on its premises around the world. You want to be able to manage these workloads consistently and centrally, and you want to stop managing infrastructure.

What should your organization do?

A. Migrate the workloads to a public cloud

Your organization stores highly sensitive data on-premises that cannot be sent over the public internet. The data must be processed both on-premises and in the cloud.

What should your organization do?

- B. Create a Cloud VPN tunnel between Google Cloud and your data center
- C. Order a Partner Interconnect connection with your network provider

Your company's development team is building an application that will be deployed on Cloud Run. You are designing a CI/CD pipeline so that any new version of the application can be deployed in the fewest number of steps possible using the CI/CD pipeline you are designing. You need to select a storage location for the images of the application after the CI part of your pipeline has built them.

What should you do?

B. Store the images in Container Registry

Each of the three cloud service models - infrastructure as a service (laaS), platform as a service (PaaS), and software as a service (SaaS) - offers benefits between flexibility and levels of management by the cloud provider and the customer.

Why would SaaS be the right choice of service model?

B. You want to minimize the level of management by the customer

As your organization increases its release velocity, the VM-based application upgrades take a long time to perform rolling updates due to OS boot times. You need to make the application deployments faster.

What should your organization do?

B. Convert your applications into containers

Your organization uses Active Directory to authenticate users. Users' Google account access must be removed when their Active Directory account is terminated.

How should your organization meet this requirement?

D. Configure single sign-on in the Google domain

Your company has recently acquired three growing startups in three different countries. You want to reduce overhead in infrastructure management and keep your costs low without sacrificing security and quality of service to your customers.

How should you meet these requirements?

B. Host all your subsidiaries' services together with your existing services on the public cloud.

What is the difference between Standard and Coldline storage?

D. Coldline storage is for infrequently accessed data.

What would provide near-unlimited availability of computing resources without requiring your organization to procure and provision new equipment?

A. Public cloud

You are a program manager for a team of developers who are building an event-driven application to allow users to follow one another's activities in the app. Each time a user adds himself as a follower of another user, a write occurs in the real-time database.

The developers will develop a lightweight piece of code that can respond to database writes and generate a notification to let the appropriate users know that they have gained new followers. The code should integrate with other cloud services such as Pub/Sub, Firebase, and Cloud APIs to streamline the orchestration process. The application requires a platform that automatically manages underlying infrastructure and scales to zero when there is no activity.

Which primary compute resource should your developers select, given these requirements?

B. Cloud Functions

Your organization is developing an application that will capture a large amount of data from millions of different sensor devices spread all around the world. Your organization needs a database that is suitable for worldwide, high-speed data storage of a large amount of unstructured data.

Which Google Cloud product should your organization choose?

D. Cloud Bigtable

Your organization needs to build streaming data pipelines. You don't want to manage the individual servers that do the data processing in the pipelines. Instead, you want a managed service that will automatically scale with the amount of data to be processed.

Which Google Cloud product or feature should your organization choose?

B. Dataflow

Your organization is building an application running in Google Cloud. Currently, software builds, tests, and regular deployments are done manually, but you want to reduce work for the team. Your organization wants to use Google Cloud managed solutions to automate your build, testing, and deployment process.

Which Google Cloud product or feature should your organization use?

C. Cloud Build

Which Google Cloud product can report on and maintain compliance on your entire Google Cloud organization to cover multiple projects?

- B. Identity and Access Management
- D. Security Command Center

Your organization needs to establish private network connectivity between its on-premises network and its workloads running in Google Cloud. You need to be able to set up the connection as soon as possible.

Which Google Cloud product or feature should you use?

C. Cloud VPN

Your organization is developing a mobile app and wants to select a fully featured cloud-based compute platform for it.

Which Google Cloud product or feature should your organization use?

B. Firebase

Your company has been using a shared facility for data storage and will be migrating to Google Cloud. One of the internal applications uses Linux custom images that need to be migrated.

Which Google Cloud product should you use to maintain the custom images?

B. Compute Engine

Your organization wants to migrate its data management solutions to Google Cloud because it needs to dynamically scale up or down and to run transactional

SQL queries against historical data at scale. Which Google Cloud product or service should your organization use?

D. Cloud Spanner

Your organization needs to categorize objects in a large group of static images using machine learning. Which Google Cloud product or service should your organization use?

C. Cloud Vision API

Your organization runs all its workloads on Compute Engine virtual machine instances. Your organization has a security requirement: the virtual machines are not allowed to access the public internet. The workloads running on those virtual machines need to access BigQuery and Cloud Storage, using their publicly accessible interfaces, without violating the security requirement.

Which Google Cloud product or feature should your organization use?

- B. Cloud NAT (network address translation)
- D. Private Google Access

Which Google Cloud product is designed to reduce the risks of handling personally identifiable information (PII)?

C. Cloud Data Loss Prevention

Your organization is migrating to Google Cloud. As part of that effort, it needs to move terabytes of data from on-premises file servers to Cloud Storage. Your organization wants the migration process to be automated and to be managed by Google. Your organization has an existing Dedicated Interconnect connection that it wants to use. Which Google Cloud product or feature should your organization use?

A. Storage Transfer Service

Your organization needs to analyze data in order to gather insights into its daily operations. You only want to pay for the data you store and the queries you perform. Which Google Cloud product should your organization choose for its data analytics warehouse?

D. BigQuery

Your organization wants to run a container-based application on Google Cloud. This application is expected to increase in complexity. You have a security need for fine-grained control of traffic between the containers. You also have an operational need to exercise fine-grained control over the application's scaling policies.

What Google Cloud product or feature should your organization use?

A. Google Kubernetes Engine cluster

Which Google Cloud product or feature makes specific recommendations based on security risks and compliance violations?

B. Security Command Center

Which Google Cloud product provides a consistent platform for multi-cloud application deployments and extends other Google Cloud services to your organization's environment?

D. Anthos

Your organization is developing an application that will manage payments and online bank accounts located around the world. The most critical requirement for your database is that each transaction is

handled consistently. Your organization anticipates almost unlimited growth in the amount of data stored.

Which Google Cloud product should your organization choose?

D. Cloud Spanner

Your organization wants an economical solution to store data such as files, graphical images, and videos and to access and share them securely.

Which Google Cloud product or service should your organization use?

A. Cloud Storage

Your organization wants to predict the behavior of visitors to its public website. To do that, you have decided to build a machine learning model. Your team has database-related skills but only basic machine learning skills, and would like to use those database skills.

Which Google Cloud product or feature should your organization choose?

A. BigQuery ML

Your organization needs to restrict access to a Cloud Storage bucket. Only employees who are based in Canada should be allowed to view the contents.

What is the most effective and efficient way to satisfy this requirement?

D. Create a group consisting of all Canada-based employees, and give the group access to the bucket

Your organization is moving an application to Google Cloud. As part of that effort, it needs to migrate the application's working database from another cloud provider to Cloud SQL. The database runs on the MySQL engine. The migration must cause minimal disruption to users. Data must be secured while in transit.

Which should your organization use?

C. Database Migration Service

Your organization is developing and deploying an application on Google Cloud. Tracking your Google Cloud spending needs to stay as simple as possible.

What should you do to ensure that workloads in the development environment are fully isolated from production workloads?

D. Put the development resources in their own project

Your company is running the majority of its workloads in a co-located data center. The workloads are running on virtual machines (VMs) on top of a hypervisor and use either Linux or Windows server editions. As part of your company's transformation strategy, you need to modernize workloads as much as possible by adopting cloud-native technologies. You need to migrate the workloads into Google Cloud.

What should you do?

D. Migrate the workloads using Migrate for Anthos

Your organization is running all its workloads in a private cloud on top of a hypervisor. Your organization has decided it wants to move to Google Cloud as quickly as possible. Your organization wants minimal changes to the current environment, while using the maximum amount of managed services Google offers.

What should your organization do?

B. Migrate the workloads to Compute Engine

Your organization is releasing its first publicly available application in Google Cloud. The application is critical to your business and customers and requires a 2- hour SLA.

How should your organization set up support to minimize costs?

B. Enroll in Enhanced Support

Your organization offers public mobile apps and websites. You want to migrate to a Google Cloud-based solution for checking and maintaining your users' usernames and passwords and controlling their access to different resources based on their identity.

Which should your organization choose?

B. Identity Platform

Which Google Cloud service or feature lets you build machine learning models using Standard SQL and data in a data warehouse?

A. BigQuery ML

Your organization runs an application on virtual machines in Google Cloud. This application processes incoming images. This activity takes hours to create a result for each image. The workload for this application normally stays at a certain baseline level, but at regular intervals it spikes to a much greater workload.

Your organization needs to control the cost to run this application.

What should your organization do?

- A. Purchase committed use discounts for the baseline load
- C. Leverage sustained use discounts for your virtual machines

Your organization is developing a plan for migrating to Google Cloud.

What is a best practice when initially configuring your Google Cloud environment?

B. Define your resource hierarchy with an organization node on top

Your organization runs many workloads in different Google Cloud projects, each linked to the same billing account. Each project's workload costs can vary from month to month, but the overall combined cost of all projects is relatively stable. Your organization needs to optimize its cost.

What should your organization do?

C. Turn on committed use discount sharing, and create a commitment for the combined usage

How should a multinational organization that is migrating to Google Cloud consider security and privacy regulations to ensure that it is in compliance with global standards?

A. Comply with data security and privacy regulations in each geographical region

Your organization wants to optimize its use of Google Cloud's discounts on virtual machine-based workloads. You plan to use 200 CPUs constantly for the next 3 years, and you forecast that spikes of up to 300 CPUs will occur approximately 30% of the time. What should you choose?

C. 3-year committed use discount for 200 CPUs

Your organization needs to minimize how much it pays for data traffic from the Google network to the internet. What should your organization do?

A. Choose the Standard network service tier.

Your organization wants to migrate your on-premises environment to Google Cloud. The on-premises environment consists of containers and virtual machine instances. Which Google Cloud products can help to migrate the container images and the virtual machine disks?

B. Artifact Registry and Cloud Storage

Your company security team manages access control to production systems using an LDAP directory group.

How is this access control managed in the Google Cloud production project?

C. Assign the proper role to the Google Group in the project's IAM Policy.

Your organization wants to be sure that is expenditures on cloud services are in line with the budget. Which two Google Cloud cost management features help your organization gain greater visibility into its cloud resource costs? (Choose two.)

- A. Billing dashboards
- B. Resource labels

Your organization needs to process large amounts of data from an online application that operates continuously. You do not want to be required to provision infrastructure or create server clusters. What should your organization choose?

D. Dataflow

Your organization needs to ensure that the Google Cloud resources of each of your departments are segregated from one another. Each department has several environments of its own: development, testing, and production. Which strategy should your organization choose?

B. Create a folder per department, and create a project per environment in each folder.

Your organization is defining the resource hierarchy for its new application in Google Cloud. You need separate development and production environments. The production environment will be deployed in Compute Engine in two regions. Which structure should your organization choose?

C. Create one project for the development environment and one project for the production environment.

Your organization meant to purchase a 3-year Committed Use Discount, but accidentally purchased a 1-year Committed Use Discount instead. What should your organization do?

C. Contact Cloud Billing Support.

Your organization needs to allow a production job to have access to a BigQuery dataset. The production job is running on a Compute Engine instance that is part of an instance group.

What should be included in the IAM Policy on the BigQuery dataset?

C. The Compute Engine service account

Your team is publishing research results and needs to make large amounts of data available to other researchers within the professional community and the public at minimum cost.

How should you host the data?

A. Use a Cloud Storage bucket and enable x€Requester Pays.x€

Your company needs to segment Google Cloud resources used by each team from the others. The teams' efforts are changing frequently, and you need to reduce operational risk and maintain cost visibility. Which approach does Google recommend?

A. One project per team

How do Migrate for Compute Engine and Migrate for Anthos differ?

D. Migrate for Anthos migrates to containers, and Migrate for Compute Engine migrates to virtual machines.

Your large and frequently changing organization's user information is stored in an on-premises LDAP database. The database includes user passwords and group and organization membership.

How should your organization provision Google accounts and groups to access Google Cloud resources?

C. Use Google Cloud Directory Sync to create users

Your organization recently migrated its compute workloads to Google Cloud. You want these workloads in Google Cloud to privately and securely access your large volume of on-premises data, and you also want to minimize latency.

What should your organization do?

C. Peer your on-premises data center to Google's Edge Network

Your organization consists of many teams. Each team has many Google Cloud projects. Your organization wants to simplify the management of identity and access policies for these projects.

How can you group these projects to meet this goal?

C. Use folders to group each team's projects

An organization needs to categorize text-based customer reviews on their website using a pretrained machine learning model.

Which Google Cloud product or service should the organization use?

A. Cloud Natural Language API

An organization is planning its cloud expenditure.

What should the organization do to control costs?

C. Review cloud resource costs frequently because costs depend on usage.

An organization is searching for an open-source machine learning platform to build and deploy their own custom machine learning applications using TPUs.

Which Google Cloud product or service should the organization use?

A. TensorFlow

What is an example of unstructured data that organizations can capture from social media?

A. Post comments

An organization relies on online seasonal sales for the majority of their annual revenue.

Why should the organization use App Engine for their customer app?

B. Autoscales during peaks in demand

An organization is using machine learning to make predictions. One of their datasets mistakenly includes mislabeled data.

How will the prediction be impacted?

B. Increased risk of inaccuracy

A global organization is developing an application to manage payments and online bank accounts in multiple regions. Each transaction must be handled consistently in their database, and they anticipate almost unlimited growth in the amount of data stored.

Which Google Cloud product should the organization choose?

B. Cloud Spanner

An organization has servers running mission-critical workloads on-premises around the world. They want to modernize their infrastructure with a multi-cloud architecture.

What benefit could the organization experience?

D. Reduced likelihood of system failure during high demand events

An organization needs to run frequent updates for their business app.

Why should the organization use Google Kubernetes Engine (GKE)?

B. Seamless changes can be made without causing any application downtime.

An organization wants to use Apigee to manage all their application programming interfaces (APIs).

What will Apigee enable the organization to do?

B. Measure and track API performance