Describe the benefits of manageability in the cloud

- Two types of manageability.

Management of the cloud

- Leveraging cloud resources like:
  - Automatically scale resources deployment based on need.
  - Deploy resources based on a pre-configured template, there is no need for manual configs.
  - Monitor the health of resources and automatically replace failing resources.
  - Receive automatic alerts based on cloud metrics so you're aware of performance in real time.

Management in the cloud

- How you are able to manage your cloud environment and resources like:
  - Through a web portal.
  - Using CLI.
  - Using API's
  - Using Powershell.

Describe Infrastructure as a service

- Infrastructure as a service (IaaS) is the most flexible category of cloud services.
- Cloud provider is responsible for maintaining hardware, network connectivity and physical security.
- You are responsible for everything else: operating system configuration, maintenance, network configuration, firewall, storage configuration and etc...

- This means renting hardware in a cloud datacenter, hardware is up to you.
- More responsability.
- Scenarios
  - Lift-and-shift migration
    - Migrating from your private data center to a public one moving the on-premise things to it
  - Testing and development
    - You have configs for test and development that you require to replicate fast.
    - We can start on similar environments pretty easily with the IAAS infrastructure

Platform as a service (PAAS)
- Middle ground between renting space (IAAS) and paying for complete software (SAAS).
- The cloud provider maintains effective ~~[illegible]~~ physical infrastructure physical security and connection to the internet, operating systems middleware, development tools, business intelligence services that make up the cloud solution and etc...
- No worrying with licensing or patching.
- Scenarios
  - Development Framework: PaaS provide a framework that devs can build upon to develop or customize cloud-based apps.
    - This reduces amount of code because the cloud offers features such as scalability, high-availability, multi-tenant, etc...

- Analytics and Business Intelligence
  - Tools provided as a service with PaaS allow organizations to analyze and mine their data finding insights and patterns and predicting outcomes to improve forecasting product design decisions, investment returns and other business decisions.

Software as a service

- using renting a fully developed app such as: email, financial system messaging app, etc...
- less flexible but easier to use.

~~scenario~~

- Scenarios
  - Email and messaging
  - Business productivity apps.
  - Finance and expense tracking.