AWS Cloud Practitioner Essentials

* Cloud Computing
  + EC2 (Elastic Cloud Compute)
    - Raw compute capacity
    - Multitenancy
      * Hypervisor
    - Scaling
      * Vertical
      * Horizontal
        + Auto Scaling

dynamic scaling

responds to changing demand

predictive scaling

automatically schedules the right number of Amazon EC2 instances based on predicted demand

* + - * + ELB Elastic Load Balancing
    - Instance Types
      * Families
        + General purpose

application servers

gaming servers

backend servers for enterprise applications

small and medium databases

* + - * + Compute optimized

high-performance web servers

compute-intensive applications servers

dedicated gaming servers

batch processing workloads that require processing many transactions

* + - * + Memory optimized

real-time processing

large amount of unstructured data

* + - * + Accelerated computing

floating-point number calculations

graphics processing

data pattern matching

* + - * + Storage optimized

high IOPS requirement

* + - Pricing
      * On-Demand
      * Savings Plans
        + <= 72%
      * Reserved Instances
        + Reserved Instances require a commitment of either 1 year or 3 years.
      * Spot Instances
        + <= 90%
      * Dedicated Hosts
  + Messaging
    - SNS Simple Notification Service
      * publish/subscribe
    - SQS Simple Queue Service
      * queuing service
  + Serverless
    - Lambda
    - ECS Elastic Container Service
    - EKS Elastic Kubernetes Service
    - Fargate
* Resources
  + Overview of Amazon Web Services
  + AWS FUNDAMENTALS
  + Types of Cloud Computing
* Key values
  + Pay for what you need
    - Pay as you go
  + Undifferentiated heavy lifting
* Q&A
  + What is cloud computing?
    - On-demand delivery of IT resources and applications through the internet with pay-as-you-go pricing
  + What is another name for on-premises deployment?
    - Private cloud deployment.
  + How does the scale of cloud computing help you to save costs?
    - The aggregated cloud usage from a large number of customers results in lower pay-as-you-go prices.