

## Section 15: Review of GCP Compute Services

### 4 Main Services

1. **Compute Engine**
    - ↳ Maximum control
  2. **Kubernetes engine**
    - ↳ Managed cluster
    - ↳ Containerized
  3. **App engine**
    - ↳ Minimal configuration
    - ↳ Containerized
    - ↳ Google specific
- ↳ **Cloud Functions**
  - ↳ Responding to GCP events

### Exam

#### Compute Engine

- \* How to create Instances
  - ↳ console
  - ↳ command line
- \* Advanced features
  - ↳ Sole Tenancy: 1 cloud
  - ↳ Shielded VM's
  - ↳ GPU's
- \* Images and Snapshots
- \* Instance Groups
- \* Cost Structure of different services
- \* GCloud compute commands

#### Kubernetes

- \* container orchestration
- \* 1 cluster → Multiple Nodes
- \* Pods, deployments, services
- \* GCloud container vs kubectl
- \* Container Registry Images + Details

#### App Engine

- \* application structure
  - ↳ services
  - ↳ version
  - ↳ instances
- \* How to deploy
- \* Scaling options
- \* Traffic splitting

#### Cloud Functions

- \* event based
- \* event sources
  - ↳ HTTP
  - ↳ Cloud Pub/Sub
  - ↳ Cloud Storage
  - ↳ Firebase
  - ↳ Monitoring
- \* Different languages