Benefits of Cloud Computing

Elasticity	Ability to acquire and release resources as you need them.
Reliability	Ability to deploy resources in different regions and availability zones.
Agility	Go global in minutes.

Types of Cloud Computing

Infrastructure as a Service (IaaS)	Full control of server in the cloud.
Platform as a Service (PaaS)	Deploy custom services to the cloud.
Software as a Service (SaaS)	Already made services in the cloud.

Cloud Computing Deployment Models

Public Cloud	Provider like AWS, GCP, or Azure
Private Cloud	Private data center using something like VMWare.
Hybrid Cloud	Combination of using Public Cloud and Private Cloud.

AWS Global Infrastructure

AWS Regions	Clusters of data centers in specific geographic regions.
AWS Availability Zones	One or more data centers.
AWS Edge Locations	High availability for Amazon CloudFront CDN and Amazon Route 53 DNS.

Cloud Economics

AWS TCO Calculator	Compare costs of your data center versus moving to AWS.
AWS Pricing Calculator	Calculate the monthly cost of AWS services.
AWS Cost Explorer	Review current costs, predict future costs, and provide recommendations.

Supporting AWS Infrastructure

AWS Personal Health Dashboard	Monitors alerts when there are issues affecting AWS.
AWS Trusted Advisor	Tool to check your usage with AWS best practices.

Trusted Advisor Recommendations

Cost Optimization
Performance
Security
Fault Tolerance
Service Limits

AWS Support Plans

Support Plan	Email	Chat	Phone
Basic			
Developer	Yes		
Business	Yes	Yes	Yes
Enterprise	Yes	Yes	Yes

Support Response Times

Incident Type	Developer	Business	Enterprise
General Guidance	24 Business Hours	24 Hours	24 Hours
System Impaired		12 Hours	12 Hours
Production System Impaired		4 Hours	4 Hours
Production System Down		1 Hour	1 Hour
Business Critical System Down			15 Minutes

AWS Well Architected Framework

Operational Excellence
Security
Reliability
Performance Efficiency
Cost Optimization

Shared Responsibility Model	
Customer	**AWS**
Customer Data	Software
Platform, Applications, Identity & Access Management	Compute, Storage, Database, Networking
Operating System, Network and Firewall Configuration	Hardware
Client Side Data Encryption & Authentication	Regions, Availability Zones, Edge Locations
Server Side Encryption	
Network Traffic Encryption & Identity	