

Security+ SY0-701 Formula Cheat Sheet

1. Risk Management Formulas

- Risk = Threat x Vulnerability
- SLE (Single Loss Expectancy) = Asset Value (AV) x Exposure Factor (EF)
- ALE (Annual Loss Expectancy) = SLE x Annual Rate of Occurrence (ARO)
- ROI (Return on Investment) = (Gain from Investment - Cost of Investment) / Cost of Investment

2. Availability & Reliability

- MTBF: Mean Time Between Failures (repairable systems)
- MTTF: Mean Time To Failure (non-repairable systems)
- MTTR: Mean Time To Repair
- Availability (%) = $MTBF / (MTBF + MTTR) * 100$

3. Cryptographic Essentials

- AES Key Sizes: 128, 192, 256 bits
- RSA Key Sizes: 2048 bits or higher
- Hashing:
 - MD5: 128-bit
 - SHA-1: 160-bit
 - SHA-256: 256-bit

4. Additional Concepts

- CIA Triad: Confidentiality, Integrity, Availability
- Defense in Depth: Multiple layers of security controls
- Zero Trust Model: Never trust, always verify

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- NIST RMF: Categorize > Select > Implement > Assess > Authorize > Monitor