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1, "All users have access"

$$\forall x (User(x) \rightarrow HasAccess(x))$$

2, a). "There exists a threat that can exploit the system"

$$\exists x \cdot (Threat(x) \wedge CanExploit(x, system))$$

b) "There is an incident concerning the server that is of high severity"

$$\exists x (Incident(x) \wedge Concerns(x, Server) \wedge HighSeverity(x))$$

c) "All devices are monitored"

$$\forall x (Device(x) \rightarrow Monitored(x))$$

d). "Every Administrator can manage policies"

$$\forall x \cdot (Admin(x) \rightarrow CanManage(x, Policies))$$

e) ." There Exists a breach that compromised data and is costly"

$$\exists x (Breach(x) \wedge CompromisedData(x, Data) \wedge Costly(x))$$

3,

a) $\forall z (Vulnerability (z) \rightarrow \neg Secure(z))$

"All Vulnerabilities are Insecure"

b) $\exists p (Alert(p) \land TriggeredBy(p, Malware))$

"There is an alert that was triggered by a
Malware"

c) $\exists k (Key(k) \land UsedIn.(k, Encryption) \land IsValid(k))$

"There is a key that is used in encryption
and the key is valid"