1. จงพิจารณาว่าการอนุมานต่อไปนี้สมเหตุสมผลหรือไม่ และใช้กฎการอนุมานใด

If Socrates is human, then Socrates is mortal.
Socrates is human.

∴ Socrates is mortal

If George does not have eight legs, then he is not a spider.
George is a spider.

∴ George has eight legs.

2. กฎการอนุมานใดถูกใช้ในการสรุปสมมติฐานต่อไปนี้

a) Alice is a mathematics major. Therefore, Alice is either
a mathematics major or a computer science major.
b) Jerry is a mathematics major and a computer science
major. Therefore, Jerry is a mathematics major.
c) If it is rainy, then the pool will be closed. It is rainy.
Therefore, the pool is closed.
d) If it snows today, the university will close. The university
is not closed today. Therefore, it did not snow today.
e) If I go swimming, then I will stay in the sun too long.
If I stay in the sun too long, then I will sunburn. Therefore,
if I go swimming, then I will sunburn

3. จากสมมติฐานที่กำหนดให้ สามารถนำสู่ข้อสรุปใด และใช้กฎการอนุมานใดเพื่อนำสู่ข้อสรุปดังกล่าว

a) "If I take the day off, it either rains or snows." "I took
Tuesday off or I took Thursday off." "It was sunny on
Tuesday." "It did not snow on Thursday."
b) "If I eat spicy foods, then I have strange dreams." "I
have strange dreams if there is thunder while I sleep."
"I did not have strange dreams."
c) "I am either clever or lucky." "I am not lucky." "If I
am lucky, then I will win the lottery."
d) "Every computer science major has a personal computer."
"Ralph does not have a personal computer."
"Ann has a personal computer."
e) "What is good for corporations is good for the United
States." "What is good for the United States is good
for you." "What is good for corporations is for you to
buy lots of stuff."
f) "All rodents gnaw their food." "Mice are rodents."
"Rabbits do not gnaw their food." "Bats are not rodents."

4. จากสมมติฐานที่กำหนดให้ จงระบุกฎการอนุมานในแต่ละขั้นที่ใช้

a) "Doug, a student in this class, knows how to write
programs in JAVA. Everyone who knows howto write
programs in JAVA can get a high-paying job.
Therefore,someone in this class can get a high-paying job."
b) "Somebody in this class enjoys whale watching. Every
person who enjoys whale watching cares about ocean pollution.
Therefore, there is a person in this class who cares about ocean pollution."
c) "Each of the 93 students in this class owns a personal computer. Everyone
who owns a personal computer can use a word processing program.
Therefore, Zeke,a student in this class, can use a word processing program."
d) "Everyone in New Jersey lives within 50 miles of the ocean. Someone in
New Jersey has never seen the ocean.
Therefore, someone who lives within 50 miles of the ocean has never seen the
ocean."