

i. **Determine whether the following passages contain arguments**

1. No part of this work covered by the copyright herein may be reproduced, transmitted, stored, or used in any form or by any means graphic, electronic, or mechanical, including but not limited to photocopying, recording, scanning, digitizing, taping, Web distribution, information networks, or information storage and retrieval systems, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without the prior written permission of the publisher.
2. When you go to a job interview, be sure to dress neatly and be on time. Be sure to shake your employer's hand and look him square in the eye. Try to show him you are interested and you really want the job.
3. You just said that no mammal can fly, but that is inaccurate. At least one mammal has wings and can fly. For example, bats are mammals.
4. Meseret, who was an eye witness to the accident, said that the driver of the Honda ran a red light when he struck the Ford. Since Meseret has a reputation for telling the truth and has nothing to gain by lying, we may conclude that the driver of the Honda did indeed run a red light when he struck the Ford.
5. Chopping onions makes you cry because when you cut into an onion you break its cells. This releases sulfenic acids, which lead to the production of a powerful gas called propanethiol sulfur oxide. When this gas reaches your eyes, it reacts with the water in your tears to produce sulfuric acid.

ii. **Identify the conclusion of the following arguments**

1. [1]It really does matter if you get enough sleep. [2]We need sleep to think clearly, react quickly, and create memories. [3]Studies show that people who are taught mentally challenging tasks do better after a good night's sleep. [4]Other research suggests that sleep is needed for creative problem solving.
2. [1] The selling of human organs, such as hearts, kidneys, and corneas, should be outlawed. [2] If this practice is allowed to get a foothold, people in desperate financial straits will start selling their own organs to pay their bills. Alternately, [3] those with a criminal bent will take to killing healthy young people and selling their organs on the black market.[4] In the final analysis, the buying and selling of human organs comes just too close to the buying and selling of life itself.
3. [1] Society values white lives more than black lives. This is clear from the fact that [2] killers of whites are much more likely to be sentenced to death than killers of blacks.[3] Of the 1788 people currently on death row, 1713 were convicted of killing a white person. Yet [4] blacks are six times more likely to be murder victims than whites are.[5] In Florida, no one has ever been executed for murdering a black person, but [6] dozens have been executed for murdering white people.
4. [1] It appears that animals may be able to predict earthquakes. [2] Prior to a major quake in China, hundreds of snakes suddenly appeared from hibernation and froze to death in the snow, [3] fish were seen leaping from rivers and lakes, and [4] cows and horses refused to enter barns. Also, [5] prior to a quake in Fremont, California, a flood of callers reported strange behavior from their pets and domestic animals.
5. [1] The conditions under which many food animals are raised are unhealthy for humans. [2] To keep these animals alive, large quantities of drugs must be administered. [3] These drugs remain in the animals' flesh and are passed on to the humans who eat it.

iii. **Determine whether the following arguments are deductive or inductive**

1. Look at her shoulder, there is a tattoo of Emperor H/Sellase. Therefore, she is probably a Rastafarian.
2. Every time I've eaten *fir fir* I have got stomach cramps. So, it's a rule that when I eat *fir fir* I get stomach cramps.
3. It must be raining outside. After all, if it weren't, then the ground would be dry, but it's soaking wet.
4. The Ethiopian parliament has more members than there are days in the year. Therefore, at least two members of the Ethiopian Parliament have the same birthday.

5. If water boils at 100 degree siliceous, then it evaporates. If water evaporates, then it simply changes its chemical character into gas. Thus, if water boils at 100 degree siliceous, then it simply changes its chemical character into gas.

iv. **Determine whether the following Deductive arguments are Valid or Invalid**

1. Some animals are mammals. Ants are animals. So, ants are mammals.
2. All banks are financial institutions. *CBE* is a financial institution. So, *CBE* is a bank.
3. Since some fruits are green and some fruits are apples, it follows that some fruits are green apples.
4. David is shorter than Saul. Saul is shorter than Goliath. It follows that David is shorter than Goliath.
5. Samuel Morse invented the telegraph. Alexander Graham Bell did not invent the telegraph. Consequently, Morse is not identical with Bell.
6. William Shakespeare wrote *Hamlet*. Leo Tolstoy is identical with William Shakespeare. It follows that Leo Tolstoy wrote *Hamlet*.

v. **Determine whether the following inductive arguments are strong or weak**

1. Of all the 50 million swans, I saw, nothing is black. Therefore, no swan is black.
2. After eating lunch at the same restaurant, five individuals became ill with hepatitis. Inspectors from the Health department learned that while the five individuals had eaten different foods, they had all had tomatoes in their salad. Furthermore, this was the only food that all five had eaten. The inspectors concluded that the disease had been transmitted by the tomatoes.
3. Nahom reasons as follows: I have taken three girls from AAU to dinner: Rekik, Betel and Heaven. On each occasion, these girls ordered the most expensive dinner on the menu. Therefore, I concluded that in all probability every girl from AAU will, if taken to dinner, order the most expensive thing on the menu.
4. Two independent witnesses claimed John committed the murder. John's fingerprints are the only ones on the murder weapon. John confessed to the crime. So, John committed the murder.