Complex Arguments
Complex Arguments

- Some arguments may have more than one conclusion.
- Reasons can lead to an *intermediate conclusion*, which then leads to the main/final conclusion.
- These intermediate conclusions along with their supporting arguments are called *sub-arguments*.
Example:

- [1] In some parts of the world, cars are still driven on the left side of the road. This can result in accidents involving drivers from other countries who are used to traffic being on the right. Pedestrians are also at risk from looking the wrong way before crossing the roads. Cities would be safer, therefore, if in all countries the rule were the same. Since countries where the drivers keep to the left are in a minority, those countries should change over to the right.

Identify the argument indicators in [1] and use them to analyze the argument.
Complex Arguments

C1: Cities would be safer if in all countries the rule were the same.

C2: Countries where drivers keep to the left should change over to the right.

R1: Driving on the left can cause accidents involving drivers from other countries.

R2: Pedestrians are also at risk from looking the wrong way.

R3: Countries where the drivers keep to the left are in a minority.
What about the first sentence? *In some parts of the world, cars are still driven on the left.* . . .

- While it isn’t wrong to include this as a reason, a better way to understand this sentence is to look at it as the *context* for the argument. It is because of this diversity of traffic laws that the argument even exists.

- Neither interpretation would make your analysis wrong; nor would it make any difference to an assessment of the success or failure of the argument.
A Full Analysis

Context: In some parts of the world, cars are still driven on the left.

R1: Driving on the left can cause accidents involving drivers from other countries.

R2: Pedestrians are also at risk from looking the wrong way.

C1 (IC): Cities would be safer if in all countries the rule were the same.

R3: Countries where drivers keep the left are in a minority.

C2(MC): Drive-on-the-left countries should change to the right.

- Chains of reasoning.
More Practice!

- This computer can think. So it is conscious. Since we should not kill any conscious beings, we should not switch it off.
- Marriage is becoming unfashionable. Divorce rate is at an all time high, and cohabitation is increasingly presented in a positive manner in the media. Movies are full of characters who live together and unwilling to commit to a lifelong partnership. Even newspaper columnists recommend people to live together for an extended period before marriage in order to test their compatibility.
- All university students should study critical thinking. After all, critical thinking is necessary for surviving in the new economy as we need to adapt to rapid changes, and make critical use of information in making decisions. Also, critical thinking can help us reflect on our values and purposes in life. Finally, critical thinking helps us improve our study skills.
Here is another argument that consists of a chain of reasoning. Analyze it using some of the techniques discussed in the last example.

We should not rush headlong into large-scale projects without carefully weighing the gains and the losses. Recycling used materials may in the long run prove uneconomical. The cost of collecting up and sorting rubbish, plus the cost of the recycling process itself, often makes the end product more expensive than manufacturing the same product from raw materials. This extra cost has to be paid by someone: if it is not the consumer, then it is the taxpayer in the form of subsidies. Nor is recycling always the best solution environmentally. The high levels of energy required for processing waste can cause pollution. This can also add to global warming.
Commentary

Regardless of how you choose to list and label the reasons, your analysis must identify the main conclusion, and recognize that there are two distinct sub-arguments leading to that main conclusion. For example:

R1: The cost of recycling often makes the end product...
R2: This extra cost has to be paid by someone…
IC1 (from R1/R2): Recycling used materials… uneconomical.
R3: The high level of energy required…
R4: This can also add to global warming.
IC2 (from R3/R4): Recycling is not… environmentally.
MC (from IC1/IC2): We should not rush headlong into recycling projects.
Very often, arguments are reported rather than being expressed directly. Another way of saying this is that an argument may be embedded in a report or article or piece of research and so on. While argument [2] is a direct argument, it didn’t start that way.
[2a] An environmental consortium has advised against rushing headlong into large-scale recycling projects without carefully weighing the gains and the losses, pointing out that recycling used materials may in the long run prove uneconomical. “The cost of collecting and sorting rubbish,” said their representative, “plus the cost of the recycling process itself, often makes the end product more expensive than manufacturing the same product from raw materials.” This extra cost, she went on, has to be paid by someone. . .[etc.]

Strictly speaking, this is not an argument: it is a report of an argument, made by someone other than the author of the report.
Interpreting an argument can leave you with parts of the text which don’t seem to be reasons or conclusions. Sometimes they don’t seem to belong to the argument at all, or they may even oppose the argument.
[3] Top women tennis players used to grumble that their prize money was less substantial than that paid to top male players in the same competition. They argued that they were being unequally treated. But the disparity was entirely justified and should never have been abolished. Male players just have more prowess than women. They need to win three sets out of five to take the match; the women only two. They have to play harder and faster, and expend far more energy on court than the women. But most of all, if the best woman in the tournament played any of the men, there would be no contest: the man would win.

What do you make of the first two sentences of [3]? Where do they fit in?
The answer is that they don’t fit into the actual argument. However, they are still necessary parts of the text because it would not make sense without them, but they are neither reasons nor conclusions.

We can think of everything preceding the word “But” as the target for the author’s argument. The whole point of that argument is to respond to the alleged claim of unfairness. The first two sentences provide context for the argument.

- [3] Top women tennis players used to grumble that their prize money was less substantial than that paid to top male players in the same competition. They argued that they were being unequally treated. But the disparity was entirely justified and should never have been abolished. Male players just have more prowess than women. They need to win three sets out of five to take the match; the women only two. They have to play harder and faster, and expend far more energy on court than the women. But most of all, if the best woman in the tournament played any of the men, there would be no contest: the man would win.
2) Analyze the following arguments to show their reasons and conclusions, including any intermediate conclusions. Also, separate and label any background information or opposing views which are there as a target for the argument.

2A) Recently the operators of a cruise liner were fined $18M for dumping oil and other hazardous waste at sea. This may seem substantial, but in the same year the ship earned profits of $340M. The company could well afford the fine, and dumping saved them the considerable expense of storing and legally disposing of the waste. So emptying their tanks into the ocean was probably a risk worth taking. Nor was it much of a risk. In the last decade only a handful of companies have been fined and every year there are unsuccessful attempts to prosecute. We must give the authorities greater powers and demand that they use them. Otherwise the oceans of the world are in danger of becoming open sewers.
2B) The South Pole must once have been much warmer than it is today. Scientists have recently discovered some three-million-year-old leaves preserved there in the ice. Despite their age, they are so undamaged, and preserved in such fine detail, that they could not have been carried there by wind or sea. Therefore, they can only be from trees that once grew there. The leaves belong to a species of beech tree that grows only in warm or temperate regions; and beeches do not evolve quickly enough to adapt to changes in climate.
3) Extract the argument from the following report, and identify its conclusion and supporting reasons:

A top tennis coach, Annabel Aftar, has reacted angrily to calls for a ban on grunting. Players who emit a loud explosive sound each time they hit the ball have been accused by some of putting opponents off their game. Ms. Aftar opposed a ban by saying that grunting is a natural and unstoppable accompaniment to sudden effort, and that making women play in near-silence would reduce the power of their shots, placing an unfair handicap on some but not on others. Some women can control grunting, other can’t, she said, adding that it is not just a female thing. Some men grunt almost as much as the women.