

Basic Toolbox for Critical Thinking

1. Statement

- Sentences can have more than one statement
 - There is a book on my table, and coffee is brewing on the stove (2 statements)
 - An argument needs at least 2 statements, never only one

2. Premise

- A statement given in support of another statement; a claim put forth as a reason for a conclusion

3. Conclusion

- A statement that premises are meant to support; a claim meant to be supported by reasons offered in the argument

4. Argument

- A group of statement in which some of them (the premise or premises) are intended to support another of them (the conclusions). A set of claims, one of which is meant to be supported by others.
- Does not mean a fight, dispute, contradiction, etc

Examples of premise and conclusion in action

Premise - I got food poisoning the last two times I ate at that restaurant

Conclusions - I want to avoid that restaurant from here on in

Inference - The process of moving from a premise or premises in an argument to a conclusion

Look for a conclusion

2 types of inference indicators - premise indicators and conclusion indicators

- Premise indicators are followed by a premise
 - Because, since, in view of the fact, given that, for, due to the fact that...
 - We should go back to Joe's Diner **because** we had fun there last week
 - We can expect Dad to be late, **since** he's always late when he stops at Canadian Tire
- Concl. Ind. Are followed by a concl.
 - Examples - Therefore, thus, so, it follows that, ergo, hence...
 - The quiz is tomorrow, **so** we should study
 - I got sick last time we went there; **therefore** we shouldn't go back there

Enthymemes - argument with missing aspects; missing either a premise or concl.

- **We have to figure out the implicit premise/concl.**

Implicit or hidden premise

Implicit or hidden conclusion

A simple argument only has one inference, one conclusion

Ex of complex argument

You're a student., so you're probably broke. So you likely don't have money for beer.

Complex argument \neq simple argument because it has **intermediate conclusion**

- Int. Concl. Has dual purpose - it serves as a concl. For what comes before, and serves as a premise in a continuing chain of reasoning

Argument \neq Explanations

Explanations tells why something happened - try to show why or how something is the way it is, events that have already occurred/passed

Argument - provides a reason(s) for a claim

Because is a premise ind, but not every "because" used is in a premise

If explanations is in an argument, then it is treated as making one claim

An explanation can serve either as a premise or conclusion

Conditional statement

"if...then..." statement

"If I study hard, then I'll pass PHI1101"

Is still cond. Stat. even is "then" or "if" is removed

Disjunctive sentence/ statement

"Either...or..."

"Either I'll pass PHI1101 or I'll fail it"

Sept 14, 2017

Analyzing Arguments

- Many exist, we will only use one
 - We will present arguments in **standard form** and provide **diagram** or the argument
 - Method - First detect what the conclusion is first
 - If present, identify any **inference indicators**
 - Identify if the argument is simple or complex
 - If simple, what is the concl?
 - If complex, what is the **final concl.** Along with **intermediate concl (s)**
 - **Noise:** ignore or get rid of elements that are not relevant to the argument
 - Also reformulate claims when necessary
 - **Two possibilities of argument structure**
 - Multiple premises can support a concl in one of 2 ways --> Separately or together
 - Ind. Premises each lend some support or the concl. On their own
 - **Argument with Ind. Premises in standard form**
 - Jake is a philosopher 2. Jake studies hard | 3. Jake is smart
 - Diagram:
 - Dep. Premises must be combined in order to support the concl.
 - **Argument with Dep. Premises**
 - I am taller than Rahul, Rahul is taller than you. So I must be taller than you
 - **Standard form:** 1. I am taller than Rahul 2. Rahul is taller than you | 3. I must be taller than you
 - Diagram:
 - **Combining Ind. And Dep. Premises**
 1. **Jake is a philosopher, all philosophers are geeks, Jake has a Chewbacca hat | Therefore Jake is a geek**
 - A weak or bad argument is still an argument
 1. The cat 90 is the best lawn mower you can buy, and you want the best. Therefore, you should buy the Cat 90
 1. The Cat 90 is the best lawnmower you can buy. 2. You want the best | 3. Therefore you should buy the Cat 90

- i. (1 --2) --> 3
- 2. All cats are mammals, and Felix is a cat. Therefore Felix is a mammal.
 - 1. All cats are mammals. 2. Felix is a cat | 3. Therefore Felix is a mammal
 - i. (1 --2) --> 3
- 3. The death penalty should be abolished because it's racially discriminatory. There's no evidence that it's a more effective deterrent than life imprisonment, and innocent people may be executed by mistake
 - 1. Racially discriminatory 2. There's no evidence 3. Innocent people | 4. Death penalty
 - i. 1 2 3
 - ii. \ | /
 - iii. 4
- 4. Because Jean-Guy has started on a strength and agility training program, and individuals who follow this type of program are very strong and agile, it follows that Jean-Guy will soon be very strong and agile. And anyone who is exceptionally strong and agile can make the hockey team. So Jean-Guy will make the hockey team this year.
 - 1. Jean-Guy starts program. 2. Indv. Are strong and agile. 3. Jean Guy is strong and agile. 1,2 4. Anyone strong and agile makes the hockey team. 5. Jean-Guy makes hockey team. 3, 4
 - i. (1 --2) --> 3--4) --> 5

• **Only draw the line separating the premises from the conclusions if it is simple argument ie. 1 conclusion. If complex, use numerical notation**

- 5. We should go for a hike in the Gatineau hills this weekend. The air is crisp, and the leaves are turning to lovely reds and yellows. And the exercise will be good for us, since we haven't been out all week. So let's take the hike
 - 1. The air is crisp 2. The leaves are turning 3. We haven't been out all week. 4. The exercise will be good for us 3. 5. Let's take a hike in the Gatineau hill this weekend 1,2,4
 - i. 1 2 3
 - ii. \ | /
 - iii. \ | 4
 - iv. \ | /
 - v. 5
- 6. The fate of the hikers will forever be a mystery. The *Weekly World News* said they were devoured by army ants, but not much in the WWN is true, so they probably weren't. If they weren't, we just don't know what happened to them. **So we will always be wondering. --> Redundant**

If sentence use "They" refer back to formal nouns in standard form

- 1. The WWN said they were devoured by ants 2. Not much the WWN say are true 3. The hikers probably weren't devoured by army ants 1, 2. 4. If the hikers weren't devoured by army ants we just don't know what happened to them. 5. We will always be wondering what happened to the hikers. 3, 4
 - i. 1--2 --> 3 --4) -->5

Sept 19th, 2017

- 7. The detective is unlikely to be a convincing witness since he has the reputation of being a racist. Probably, then, the defendant will be acquitted. (Complex)

- 1. Detective is unlikely witness 2. Since he is a racist (1). 3. Probably then, the defendant(2).

1
|
v

|
2
|
V
3

8. The liquid is either acidic or alkaline. If it is acidic, then the paper will turn red. If it is alkaline, then the paper will turn blue. So, the paper will turn either red or blue, but I am colour blind.

Consequently, I will not be able to tell if the liquid is acidic or alkaline.

1. Liquid is either acidic or alkaline. 2. If acidic, turn red. 3. If alkaline, turn blue. 4. So paper will turn red or blue(1,2,3). 5. But I am colour blind. 6. Consequently, I will not be able to tell if acidic or alkaline (4,5)

- i. 1 2 3
- ii. \ | /
- iii. 4 5
- iv. \ |
- v. 6

9. Here are some reasons why you should stop snorting cocaine: Cocaine is addictive; cocaine will lead to the use of even harder drugs because the cocaine user will always be looking for a greater high; cocaine is illegal; and cocaine is bad for your nose.

1. Cocaine is addictive. 2. Cocaine user will always be looking for a greater high. 3. Cocaine will lead to the use of even harder drugs (2). 4. Cocaine is illegal. 5. Cocaine is bad for your nose. 6. You should stop snorting cocaine (1,3,4,5)

- i. 1 4 5 2
- ii. \ | / \
- iii. \ | / 3
- iv. | /
- v. 6

10. We must be pretty far from civilization for the reason that the only people we have seen in the last three hours have been toting big backpacks. So, we better turn around before we get lost in the middle of nowhere.

1. The only people seen in last 3 hours have big bags. 2. We must be pretty far from civilization (1). 3. We better turn around before lost (2)

- i. 1-->2-->3

In Class, not on Brightspace:

1. Democracy is the only viable system of government because the only alternatives are either dictatorship or anarchy. Both of these are terrible systems of government, and terrible systems are not viable.

1. Only alternatives are dictatorship and anarchy 2. Both are terrible. 3. Terrible not viable | 4. Democracy only viable

- i. 1 2 3
- ii. \ | /
- iii. 4

2. I don't think we should go on holiday to Australia because it is extremely hot in the summer, and neither of us reacts well to extreme heat. Also, it's too expensive.

1. Australia is hot. 2. Neither of us likes heat. 3. Too expensive. | 4. I don't think we should go to AUS

- i. 1--2 3

- ii. \ /
 - iii. 4
- 3. What do I think of shopping at the Bay? I'll tell you! They've got great prices, and they've got a good selection of men's clothes. So the Bay is a great place to shop.
 - 1. They've got great prices. 2. The Bay (they) has got a good selection of men's clothes. |3. So the Bay is a great place to shop
 - i. 1 2
 - ii. \ /
 - iii. 3
- 4. Cole is up to no good. He's been acting suspiciously for days, and he told Rachel he was going to steal something valuable.
 - 1. Cole (he) has been acting suspiciously for days. 2. Cole (He) told Rachel he was going to steal something valuable. | 3. Cole is up to no good.
 - i. 1 2
 - ii. \ /
 - iii. 3
- 5. Because voters don't take time to understand the issues, it follows that voters have become apathetic and lazy. Consequently, it can be said that voters are alienated from the political process.
 - 1. Because voters don't take time to understand the issues. 2. It follows that voters have become apathetic and lazy. 3. Voters are alienated from the political process
 - 1
 - V
 - 2
 - V
 - 3
- 6. It follows that professors are overly particular because they never stop splitting hairs, and splitting hairs is a real sign of being overly particular. And since overly particular people tend to talk a lot, we can conclude that professors tend to be talkative.
 - 1. Splitting hairs is a sign of overly particular. 2. Profs never stop splitting hairs 3. Splitting hairs is a real sign of being overly particular (1,2). 4. Overly particular people tend to talk a lot. 5. Profs tend to be talkative (3).
 - i. 1---2
 - ii. |
 - iii. 3---4
 - iv. |
 - v. 5
- 7. Sue's Spanish must be very good now. She spent a year in Mexico living and conversing with a Mexican family, and she has attained a level one in fluency in Spanish because she spent a year studying it at the University of Mexico.
 - 1. Sue spent a year in Mexico living and conversing with a Mexican family. 2. Sue has attained a level one in fluency in Spanish because she spent a year studying it at the University of Mexico. |3. Sue's Spanish must be very good now.
 - i. 1 2
 - ii. \ /
 - iii. 3

8. The only valid reasons for dishonorable discharging someone from the Canadian Armed Forces are health problems and violations of military regulations. So, if Amal says that he was dishonorably discharged for simply being gay, he is lying or is mistaken. He is not lying. So he is mistaken.
1. The only valid reasons are health and violations. 2. If Amal says he was dishonorably discharged for simply being gay, he is lying or is mistaken(1). 3. Amal(He) is not lying. 4. So Amal (he) is mistaken (2,3).
 - i. 1
 - ii. |
 - iii. 2--3
 - iv. |
 - v. 4
9. As the saying goes, stealing from one's friends is a terrible crime. If you can't trust your friends, then who can you trust? Consider the following scenario involving three friends: Maggie, Jose, or Ling broke the window and stole the vase. Jose couldn't have done it because (not argument, explanation from the because) he was studying in his room and was observed the whole time. Maggie couldn't have done it because she was out of town at the time and has witnesses to prove it. So the thief had to be Ling
1. Maggie, Jose, or Ling broke the window and stole the vase. 2. Jose couldn't have done it because he was studying in his room and was observed the whole time. 3. Maggie couldn't have done it because she was out of town at the time and has witnesses to prove it. | 4. So the thief had to be Ling
 - i. 1--2--3
 - ii. |
 - iii. 4
10. If the dog bit the mail carrier, there would have been a scar on her leg. And some witnesses said that they saw the scar. But in any case, the mail carrier didn't deny having a scar. So the dog probably bit the mail carrier. And if that's the case, the carrier has grounds for a lawsuit. Therefore, she has grounds for a lawsuit.
1. If the dog bit the mail carrier, there would have been a scar on her leg (conditional statement). 2. And some witnesses said that they saw the scar. 3. But in any case, the mail carrier didn't deny having a scar. 4. So the dog probably bit the mail carrier (1,2,3). 5. And if that's the case, the carrier has grounds for a lawsuit. 6. Therefore, she has the grounds for a lawsuit (4,5)
 - i. 1--2--3
 - ii. |
 - iii. 4--5
 - iv. |
 - v. 6

Sept 21, 2017

1. If an individual in a coma is no longer a person, then giving him a drug to kill him is not murder. Such an individual is in fact not a person. Therefore, giving him the drug is not murder.
 1. If an individual in a coma is no longer a person, then giving him a drug to kill him is not murder. 2. Such an individual is in a coma is in fact not a person. | 3. Therefore, giving him the drug is not murder.
 - i. 1--2

- ii. |
 - iii. 3
2. Since Twitter is like an ongoing conversation, since Facebook allows you to share photos and keep track of people, and since smartphones allow you to contact people no matter where you are, social media allows you to keep in touch with people really well. Therefore, everyone should get more involved with social media.
- 1. Since Twitter is like an ongoing conversation. 2. Since Facebook allows you to share photos and keep track of people. 3. Since smartphones allow you to contact people no matter where you are. 4. Social media allows you to keep in touch with people really well (1,2,3). 5. Therefore, everyone should get more involved with social media (4).
- i. 1 2 3
 - ii. \ | /
 - iii. 4
 - iv. |
 - v. 5
3. Judged sports should be excluded from the Olympics, since there is too much subjectivity in them and subjectivity undermines the appearance of fairness, and it is crucial that Olympic sports be seen as fair. So, because boxing is a judged sport, it should be excluded from the Olympics.
- 1. There is too much subjectivity in judged sports. 2. Subjectivity undermines the appearance of fairness. 3. It is crucial that Olympic sports be seen as fair. 4. Therefore judged sports should be excluded from the Olympics (1,2,3). 5. Boxing is a judged sport. 6. Boxing should be excluded from the Olympics (4,5)
- i. 1--2--3
 - ii. |
 - iii. 4--5
 - iv. |
 - v. 6
4. Rocks do not make good pets because they have no emotional lives, and they can hurt you if you drop them on your foot. Besides, a pet should have a heartbeat, and rocks do not have one.
- 1. Rocks have no emotional lives. 2. Rocks can hurt you if you drop them on your foot. 3. A pet should have a heartbeat. 4. Rocks do not have one. | 5. Rocks do not make good pets.
- i. 1 2 3--4
 - ii. \ \ /
 - iii. 5
5. If the Montreal Canadians win the Stanley Cup, then I'll owe my dad some money. If I owe my dad some money, I'll need to go to the bank. So, if the Montreal Canadians win the Stanley Cup, I'll need to go to the bank.
- 1. If the Montreal Canadians win the Stanley Cup, then I'll owe my dad some money. 2. If I owe my dad some money, I'll need to go to the bank. | 3. So if the Montreal Canadians win the Stanley Cup, I'll need to go to the bank.
- i. 1--2
 - ii. |
 - iii. 3
6. He was seen leaving the scene of the crime; he and the deceased had been arguing earlier in the day; he has a history of violence; he was the only person with access to a Glock .45, and that was the murder weapon. I think we can conclude that he is our prime suspect.
- 1. He was seen leaving the scene of the crime. 2. He and the deceased had been arguing earlier in the day. 3. He has a history of violence. 4. He was the only person with access to a

Glock .45. 5. That was the murder weapon. | 6. I think we can conclude that he is our prime suspect.

i. 1 2 3 4--5

ii. \ \ | /

iii. 6

7. Henry will soon be very strong because he is starting a weight-lifting program, and weight lifters are very strong. And anyone who is unusually strong can make the football team. So Henry will make the team this year.

1. Henry is starting a weight-lifting program. 2. Weight lifters are very strong. 3. Henry will soon be very strong (1,2). 4. Anyone who is unusually strong can make the football team. 5. Henry will make the team this year (3,4).

i. 1

8. The time-consuming process known as "blind peer reviewing" has a long history. All the same, blind peer reviewing isn't perfect, and it does not guarantee that academic and research publications are right in any simple sense. Nonetheless, the process matters a great deal, because it imposes agreed-upon standards of expression and evidence on authors and researchers, and it subjects the work of these individuals to public peer scrutiny.

1. The blind peer review process imposes agreed-upon standards of expression and evidence on authors and researchers. 2. The process subjects the works of these individuals to public peer scrutiny. | 3. The blind peer reviewing process matters a great deal

i. 1 2

ii. √

iii. 3

Sept 26th, 2017

Non-deductive Arguments - an argument intended to provide probable (but no conclusive) support for its conclusion

The premise of a nondeductive argument are meant to make the conclusion probably or likely
Support for the conclusion is a matter of degree

Nondeductive arguments can be described as **successful** or **unsuccessful**

The degrees of probability for a **successful** nondeductive argument can be described along these lines

How probably or likely are the arguments?

1. If the premises of the argument make the conclusion almost certain, then we can describe the argument as successful, and describe the degree of support which the premises lend the conclusion as **close to certain**.
2. On the other hand, if the premises of the argument do not render the conclusion close to certain, but quite plausible, then the argument is still successful, but we can describe the support which the premises lend the conclusion as **very likely** (a great deal more likely than not)
3. If the premises of the argument provide some basis for the conclusion but no great support, then it's still **successful**, but we describe the matter of degree upon which the premises support the conclusion as being **somewhat likely** (barely more likely than not)

Successful nondeductive argument as having premises that make the conclusion: **close the certain, very likely, or somewhat likely**

Unsuccessful nondeductive argument

If the degree of support that the premises give the conclusion is little or none at all, then we describe the argument as being unsuccessful.

A nondeductive argument is unsuccessful when its premises are not relevant to the conclusion, do not adequately support the conclusion, or do not provide sufficient information that is relevant for the conclusion.

1. There are times when many of us may need to protect ourselves from home invaders. Therefore, it might be a good idea to have a home alarm installed. --> successful
2. Cole has been acting suspiciously for days, and he told Rachel he was going to steal something valuable. We may conclude that Cole is up to no good. --> successful, somewhat-very likely (2 premises)
3. There are times when any of us may need to protect ourselves from intruders. Thus, we should all keep hand grenades on our bedside table. --> unsuccessful
4. Most undergrads never take organic chem. So, the chances are that Claude, a grad pre-med student did not take organic chem. --> unsuccessful, most pre-med students are not the same as other undergrad students. If you are pre-med, chances are, you have taken organic chem
5. King has just received a scholarship to play basketball at a major division I college. This leads us to believe that King must be a very athletic young man. --> Unsuccessful, never mentioned the gender/sex King is a man.

Inductive Generalization

- Most often with inductive generalizations, we start with premises about individual members of a group and reason to conclusions about the group as a whole
 - The movement is from the particular (the sample size) to the general
 - So, whenever we begin with observations about some member of a group, and end with a generalization about all of them, it's called an inductive generalization.
 - An inductive generalization allows us to make general claims, despite being able to actually observe every single member of a class or group in order to make a general statement that is probably true.
1. I've owned 2 Dell computers, and both sucked. I'm starting to think all Dell computers are crap
 2. Two-thirds of the students at this uni receive student loans aid. Therefore, two-thirds of all uni students probably receive student loans.

More formally, an inductive generalization has *this* form
X per cent of the observed members of group

Ex. 50% of people who participated in our survey said they support the Green Party. So, we expect the Green Party to get 50% of votes in the upcoming federal election

What other info would you want to know?

1. How big was the sample size? 10 people, 100, 1000,
2. What was the demographic that made up the sample size
3. Is it across Canada?
4. How was the survey held/conducted? --> try keep as random as possible, least possible bias, what was the method --> phone, internet

5. How reliable is the survey --> online, only people who feel strongly about the subject will do the survey

Sample Size

The reliability of a generalization depends partly on the size of the sample (the sample size) used

Basing a conclusion on an inadequate sample size is the fallacy known as the 'hasty generalization'

Ex. Nova Scotians are strongly in favour of a freeze on tuition. We surveyed 500 uni stu

Bias, students self interest in freeze

Not representative of N.S people, not every person is a student

Don't specify if the students are from N.S

To be truly representative, the sample should be similar to the target group in that it:

Has all the same relevant characteristics

And has those characteristics in the same

Statistical Syllogisms

Sometimes we have good, but incomplete, knowledge of some group of people or things...

And based on that, we reach a conclusion about some member of that group

Ex.

80% of profs at UO are bilingual. So *your* bio prof is probably bilingual

83% of students at the uni are residents of ON. Linda is a student at the uni. Therefore, Linda is probably a resident of ON

The movement is from the general to the particular.

All statistical syllogisms follow this pattern (even if not stated this way):

Most people who attend uni are free thinkers. Erica attends uni. Thus, Erica is probably a free thinker.

Successful

The word "most" is vague, can range from 51% to 99%, still successful, but still would be better to have actual %

To analyze a statistical syllogism, we need to be able to identify

The individual being examined

The group to which that individual is said to belong

The characteristic being attributed and

The proportion of the group said to have that characteristic.

And the source of the info.

Plausibility Argument

The premises of a plausibility argument are meant to work together to build a case of the conclusion being plausible or reasonable.

To discern the amount of support that the premises of a plausibility argument provide, we should ask: Is the number of confirming instances relatively high? Is there a disconfirming instance?

How many premises are there that directly support the conclusion, --> confirming instances

A premises that contradicts the conclusion --> disconfirming instance

Example:

- Jones had a strong motive to murder Smith
- Jones had an opportunity to murder S
- The murder weapon had J's fingerprints on it
- J was psychologically capable of killing S
- Therefore, J murdered S

4 confirming instances (premises) that directly support the conclusion

Successful

New premise introduced: **Conclusive proof reveals that Jones was in another country at the very time that Smith was murdered.**

The disconfirming instance renders the conclusion unsuccessful even though there are 4 confirming instances

Particular to the general, --> Inductive Generalization

General to the particular, -->Statistical Syllogism

1. Beagles
 - Statistical Syllogism --> started with generalization of beagles
 - Unsuccessful, first statement talks about beagles as a whole, second statement talks about abused beagle, not representative of the generalization
2. Crime
 - Plausibility Argument
 - Successful, numerous confirming instances
3. Nurses
 - Statistical Syllogism
 - Successful, gives sources, half nurses have been surveyed, from various departments
4. Winter
 - Statistical Syllogism
 - Successful, evidence is backed up
5. Election
 - Statistical Syllogism
 - Unsuccessful, only 70 students took part but faculty is probably larger, Jane might not be a med student, can be any other faculty
 - Sample size too small
 - Too bias
6. Sandy Hill
 - Inductive Generalization --> uses a sample size to applied to general public
 - Successful,
 - 85% of half or residents is a large enough amount to create a generalization
 - Survey was conducted randomly
7. Mice
 - Plausibility argument
 - Successful
8. Death
 - Inductive Generalization
 - Unsuccessful

- There are more than two causes of deaths
 - Homicides and car crashes are more likely to appear in papers
9. Water
- Inductive Generalization --> particular (200 samples), general (Lake ON water unsafe)
 - Successful
 - 200 samples from various different points, random
10. Theatre
- Inductive Generalization
 - Unsuccessful
 - The sample size is extremely biased, mostly people that have interest in theatre
 - 500 people is a very small sample size to represent all Canadians
11. Plato
- Statistical Syllogism
 - Unsuccessful
 - Is a professor, most likely have studied Plato since they are in the Humanities Dept.
12. Elections
- Statistical Syllogism
 - Unsuccessful
 - 60% did not vote conservative, probability is not in favour of the conclusion
13. Child Abductions
- Inductive generalization
 - Unsuccessful
 - 5 cases is a small
 - Can't determine how "out of control" the epidemic is
14. Enrollment
- Statistical Syllogism
 - Successful
 - % applies to Paul
 - Source is reliable
 - Probability is high

Sept 28th, 2017

Practice Test

II.

1. Tony is Canadian, so he **probably** like hockey.
Implicit: **Most** Canadians like hockey, premise
2. Moore's dog is a bloodhound, and **most** bloodhounds have a keen sense of smell.
Implicit: conclusion, Moore's dog **probably** has a keen sense of smell
3. October 3rd is the date for the first test, and today is the 28th of September.
Implicit: conclusion, today is not the date for the first test
4. It is morally wrong to treat human beings as mere objects. So it is wrong to genetically engineer human beings

Implicit: premise, genetically engineering human beings treats them as mere objects

III.

1. Most atheists are liberals, and George is an atheist. Thus, George is probably a liberal. Therefore, George is probably in favour of increased social benefits because most liberals are in favour of increased social benefits.

1. Most atheists are liberals. 2. George is an atheist. 3. Thus, George is a liberal (1,2). 4. Most liberals are in favour of increased social benefits. 5. Therefore, George is probably in favour of increased social benefits (3, 4).

- i. 1--2
- ii. |
- iii. 3---4
- iv. |
- v. 5

2. If one takes the example of the highly popular performance troop know was *Cirque due Soleil*, then one certainly has to admit that acrobats are a fan favourite. *Cirque du Soleil* has grossed millions of dollars on the backs (and/or hands and etc.) of its acrobats. As popular as acrobatic shows such as *Cirque du Soleil* may be, many argue that acrobats are not athletes. However, such a view is mistaken for two related reasons. First, acrobats must work long hard hours to develop the strength, stamina and flexibility their work requires. If a person must work long hard hours to develop the skills necessary for their profession, then she or he is an athlete. Therefore, acrobats are athletes.

1. Acrobats must work long hard hours to develop the strength, stamina and flexibility their work requires. 2 If a person must work long hard hours to develop the skills necessary for their proefession, then she or he is an athlete | 3. Therefore, acrobats are athletes

- i. 1--2
- ii. |
- iii. 3

3. Because the free exchange of ideas (even unpopular ones) is essential to the process of democracy, and universities have an obligation to respect the democratic process; therefore, universities have an obligation to protect the free exchange of ideas on campus no matter how offended some people are by their expression. And because to silence one person threatens the democratic process of the free exchange of ideas, the controversial political pundit Ann Coulter should have been allowed to speak at the university.

1. Unis have an obligation to respect the demo process. 2. Because the free exchange of ideas is essential to the process of demo. 3. Therefore, uni have an obligation to protect the free exchange of ideas on campus (1,2). 4. Because to silence one person threatens the demo process. 5. Ann Coulter should have been allowed to speak at the uni (3,4)

- i. 1--2
- ii. |
- iii. 3--4
- iv. |
- v. 5

4. Elena should dump that creep Oscar since he sneaks around with other women behind her back. Also, it's very likely that he'll drain her financial resources because he spends all her money at the racetrack

1. Oscar sneaks around with other women. 2. Oscar spends all of Elena's money at the race track. 3. It's very likely that Oscar will drain Elena's financial resources (2). 4. Elena should dump that creep (1,3)
 - i. 1 2
 - ii. \ /
 - iii. | 3
 - iv. \ /
 - v. 4
2. Argument is trying to convince, explanation is the past --> titanic sank. Oscar spends all her money at the race track, he will probably do it in the future
3. again, vs Oscar spent all the money at the race track therefore Elena is bankrupt

III.

1. Inductive Generalization
 1. Unsuccessful, asking people that (students) are causing the disturbances, bias sample. Not all Sandy Hill res are students, group is not representative of Sandy Hill res.
2. Plausibility Argument
 1. Successful, all statements are confirming (numerous) that certainty support the conclusion as being probable
3. Inductive Generalization
 1. Unsuccessful
 - i. People that take the online survey are people that are strongly interested in the topic, surveys can be completed multiple times, not random, attracts self-selected sample, online survey is not adequate source
 - ii. Not all young people live in dorms/are students, sample is not representative of young people around the world