Exercises for

Tutorial 32. Understanding Arguments: Logic

Notes

Instructions: Write notes to answer the following questions. Type or write in the answer boxes.

- 1. What is an argument? In your own words, give as many definitions of "argument" as you can.
- 2. Rewrite the following three sentences, inserting the logical joining word "so" or "because" where you think it would make sense.
 - Using public transport would solve a lot of our pollution problems; it would help with our quality of life, too, since there would be less traffic. We should invest in a much more extensive public transit system.
 - Let's stay home. It's too hot outside for a picnic.
 - Every raven I've ever seen has been black; I suppose all ravens are black.

- 3. Define a premise.
- 4. Define a conclusion.
- 5. What is the difference between the conclusion of your essay, and the conclusion of your argument?
- 6. What is standard form?

- 7. How do you lay out an argument in standard form?
- 8. When someone is presenting an argument, where can you expect to find the logical conclusion?

Exercise 1

Instructions: A short one- or two-sentence argument is put into three different "standard form" summaries. Choose the answer that you think is correct. *Click on a checkbox to make your choice*. After completing the exercise, check the "Answer Key" at the end of this file.

1. We should all eat more bananas. They're very nutritious and don't cost much. And they contain 100% of your daily potassium needs!

	B	C
(a) They're very nutritious.	(a) We should all eat more	(a) They're very nutritious.(b) They don't cost much.
(b) They contain 100% of daily potassium needs, and they don't cost much.	bananas.(b) They don't cost much.(c) They're very nutritious.	(b) They don't cost much.
Therefore, we should all eat more bananas.	Therefore, they contain all of our daily potassium needs.	Therefore, we should all eat more bananas.

2. Frank is a really arrogant man. I know you like him, but he never even acknowledges my presence. In fact, he's rude and offhand to everyone so far as I can tell.

	B	C
(a) Frank is really arrogant.	(a.) Frank is rude and offhand	(a) Frank is rude and offhand
(b) I know you like him.	to everyone.	to everyone.
		(b.) He doesn't even
Therefore, he's rude and	Therefore, he's really	acknowledge me.
offhand to everyone.	arrogant.	Therefore, Frank is really
		arrogant.

3. Well, Jenny hasn't answered my calls and she didn't respond to my email. So it looks like she doesn't want to talk to me.

	B	C
(a) Jenny doesn't want to talk	(a) Jenny hasn't responded to	(a) Jenny hasn't responded to
to me.	my email.	my attempts to contact her.
	(b) She hasn't responded to my	
Therefore, she hasn't	phone calls.	Therefore, Jenny doesn't
responded to my email or	Therefore, Jenny doesn't	want to talk to me.
phone calls.	want to talk to me.	

4. After paying for the new roof, I've decided not to buy a new car. And more money is coming out of my salary now to cover my health benefits. These expenses, on top of living in the Bay Area which is expensive anyway, just makes it impossible.

A	B	C
(a) I can't afford it.	(a) I paid for a roof.	(a) I paid for the roof.
	(b) My salary is lower.	(b) My salary is lower.
Therefore, I won't buy a	(c) I live in the expensive Bay	(c) I live in the expensive
new car.	Area.	Bay Area.
	Therefore, I won't buy a new	Therefore, I can't afford a
	car.	new car.

5. This document, a diary that is supposed to be by the famous serial killer Jack the Ripper, can't be authentic. It's not written in his handwriting and it sounds phony. Who could believe this drivel?

	B	C
(a) The diary is supposed to	(a) The diary can't be	(a) The diary isn't written in
be by Jack the Ripper.	authentic.	the right handwriting.
(b) It sounds phony.	(b) Who could believe this	(b) It sounds phony.
(c) It's not in his writing.	drivel?	
	(c) It's not written in his	Therefore, it can't be
Therefore, the diary can't	handwriting.	authentic.
be authentic.	Therefore, the diary sounds	
	phony.	

6. The suspect has been identified by two eyewitnesses and has a strong motive for the murder. I mean, how much evidence does it take to convince you? Of course he's guilty.

	B	C
(a) The suspect has been identified by two	(a) The suspect has been identified by two eyewitnesses	(a) The suspect has been identified by two
eyewitnesses.	and has a strong motive.	eyewitnesses.
(b) The suspect has a strong motive for the murder.	(b) How much evidence does it take to convince you?	(b) The suspect has a strong motive for the murder.
Therefore, how much	Therefore, the suspect is	Therefore, the suspect is
evidence does it take to convince you?	guilty.	guilty.

7. Thank you for your interest in our company. We were very interested in your application, and you have a very impressive resume. However, after consideration, we are unable to offer you the job because you do not have sufficient qualifications.

	B	C
(a) You have a very	(a) You do not have sufficient	(a) We were very interested
impressive resume	qualifications.	in your application.
(b) We were very interested		(b) But you don't have
in your application.	Therefore, we are unable to	sufficient qualifications.
(c) However, we can't offer	offer you the job.	
you the job because you don't		Therefore, we are unable to
have sufficient qualifications.		offer you the job.
Therefore, thank you for		
your interest.		

8. Sure, gangsta rap has energy and there are plenty of talented people working in the field. But in the end, it's crummy music. The few melodies mostly come from other songs, and are not remarkable; the controversial "hard-core" depictions of street life are just the usual dimwitted macho posturing about street life. It's all been done before, by blues and folk singers, and done much better.

	B	□ C
(a) Gangsta rap has talented	(a) Gangsta rap has	(a) Gangsta rap has
people and energy.	unremarkable and "borrowed"	unremarkable and
	melodies.	"borrowed" melodies.
(b) But it's crummy music.	(b) The lyrics are just the	(b) The lyrics are just the
	usual macho posturing about	usual macho posturing.
Therefore, it's all been done	street life.	
better before.	(c) It's crummy music.	Therefore, it's crummy
	Therefore, it's all been done	music.
	before by blues and folk	
	singers.	

9. Gangsta rap can be nasty. It can be crude, violent, and boastful. It can even be boring. But that's true of all music. So what? Rap, at its best, has energy you don't hear anywhere else. It tells stories that no one else wants to tell. You don't have to like it, but you have to admit that it's real art.

	B	C
(a) Gangsta rap has energy.(b) It tells stories that no one else wants to tell.	(a) All music can be boring, nasty, etc.(b) Rap is no different.	(a) Rap has energy and tells good stories.(b) You don't have to like it, but it's real art.
Therefore, it's real art.	Therefore, at its best rap has energy and tells good stories.	Therefore, we should all buy rap CDs.

10. Get out of the ocean now! What's wrong with you? Are you nuts? Can't you read the sign that says, "Dangerous Tides?" I mean, I know the water looks nice, but don't be fooled. It's not nice. Ocean Beach kills more people each year than any other beach in the country.

	B	С
(a) Ocean Beach looks nice,	(a) Ocean Beach kills more	(a) Ocean Beach is very
but it's dangerous.	people each year than any	dangerous.
(b) Only crazy people would	other beach in the country.	
swim off Ocean Beach.	(b) Ocean Beach is very	Therefore, you shouldn't
	dangerous.	swim in the water.
Therefore, there is	Therefore, you shouldn't	
something wrong with you.	swim in the water.	

Click here to check the answer key.

Exercise 2

Instructions: Read the short essay that follows, and put it into standard form. You should:

- make a list of the premises (Each should be a complete sentence, and should be distinct from other premises. Try for at least three.)
- write the conclusion at the bottom (don't forget "therefore"!).

Type, write, or copy-paste these five lines into the answer box; then add your premises and conclusion. When finished, check the "Answer Key" at the end of this file.

Premise 1: Premise 2: Premise 3: Premise 4: Conclusion:

Click here to check the answer key.

[Essay] The Off-Switch Belongs to Parents

With so much junk on television today, it's important that we make sure our children are watching programs that won't do them any harm. So we need to decide who is responsible for monitoring what our children watch on television. Those who support censorship of sex and violence in network broadcasting would argue that television just shouldn't show programs that contain material unsuitable for children. These people believe that the networks themselves should monitor children's viewing habits. Their position is understandable; it would be ideal if we only ever saw the kinds of things we liked. But do you really want to have some stranger decide these things for you? I believe that it is parents, not the TV network executives, who should decide what their children should or shouldn't see. Rather than ask executives to make such choices on our behalf by censoring "unsuitable" programs, parents should exercise this control themselves by hitting the "Off" switch.

In the first place, parents should control children's viewing because they are the only people who can make such moral choices on behalf of their own families. We can't ask network executives to make those choices for everyone. There is no consensus on what makes a program "good" or "bad." As a fairly conservative Christian, I'd probably make very different choices from a progressive or agnostic parent. But I don't mind my kids watching "Sabrina the Teenage Witch," while my neighbor, a fundamentalist Christian, objects to that program as suspiciously Satanic. Nor do I mind "Mighty Morphin Power Rangers," which my liberal friends have banned in their households because it is too violent. We both have the right to bring up our children in a way that accords with our individual morals. So we should be allowed to make such choices for ourselves, and not have them imposed on us by other people-namely, a network censor.

What's more, there really isn't much evidence that violence and sex on television causes criminal behavior. To be sure, a lot of studies have been published showing that children do indeed imitate what they see on screen, and if that includes a lot of punching and kicking, they'll punch and kick. But it's a mistake to suppose that this means that the punching and kicking children will become violent. Those children whose parents tell them to stop it, and who are taught that movie behavior is not the same as real-life behavior, quickly settle down and learn the difference between action heroics and good manners. Would you want your child labeled as a future "criminal," just because he did kung-fu kicks around the living room?

In the third place, maybe we do children no favors by protecting them from every ugly thing we see. We shouldn't sanitize too much. Much of life really is ugly and violent. Children should see some of these things themselves, first-hand, to learn how to cope with them. Children who only see what is pleasant and safe are likely to grow into adulthood too naïve and innocent to cope with the world as it really is. This may sound like a terrible thing to say. Of course we all want our children to be shielded from harm, but do you really want your kids to be weak and unable to deal with the world? What kind of a society will we have then?

Ultimately, the family is always the first and most important influence a child has. Parents teach children to walk and talk; they also teach them what is right and wrong, what is unacceptable and acceptable behavior. It is certainly true that some parents fail in this duty, and fail terribly. But that doesn't mean that no parents can be trusted. Most of us are dedicated and sensible, and we should make choices for our children ourselves--and that includes television programming.

Answer Key for Exercise 1

- 1. A: No. Look again at the third premise; it's one sentence, but it's two different ideas, isn't it? The cost and the nutritional value require separate support.
 - B: No. You're on the right track. But the conclusion about potassium needs isn't the main focus of the supporting premises listed here, is it? Try again!
 - C: Yes. The price and the nutrition are separate premises that support the conclusion.
- 2. A: No. Knowing that you like Frank doesn't support the point that's he's rude to everyone.
 - B: Yes. You're basing your conclusion about his arrogance on the premise that Frank is rude and offhand to everyone, including you, so you don't need that as a separate premise.
 - C: Yes--OK. Your premises do support your conclusion; but do you need them both? If Frank is rude and offhand to everyone, wouldn't that include you? Try one more option.
- 3. A: No. If the speaker had put the information the other way around, this would be correct. But the speaker doesn't declare that because Jenny doesn't want to talk to me, she hasn't answered my email. She says the opposite: because Jenny hasn't answered her emails, Jenny must not want to talk to her.
 - B: Yes. Based on the email and phone calls, the speaker has drawn a conclusion.
 - C: Yes. The evidence supports the conclusion. You could have separated the premises, but this is neater.
- 4. A: Yes. The premises all boil down to this: the speaker can't afford it, so no new car.
 - B: Yes--OK. Actually, you could have boiled down all these premises into one premise, couldn't you? This is OK, but try a more compact solution.
 - C: Not quite! It's almost the same as Version B, but look at the conclusion: it's not precisely what the speaker actually says. The speaker says that he won't buy a new car, and gives various reasons which boil down to his not being able to afford it. This version does present a coherent standard form, but it's for a very slightly different argument.
- 5. A: No. You're on the right track, but one of these premises offers background rather than makes a statement that supports the conclusion. Can you spot it?
 - B: No. One of these is not a statement, let alone a premise! Try again!
 - C: Yes. The premises are indeed statements that support the conclusion.
- 6. A: No. Look at the conclusion: is it a statement? Does it really express the main point of the argument, or just the exasperation of the speaker?
 - B: No. The single (a) premise contains two quite separate statements, which require different support. The second (b) premise isn't even really a statement! Try again.
 - C: Yes. You have found the main point and the supporting premises.
- 7. A: No. These are the statements that stand out, but the main point of this letter is to tell you that you haven't got the job and why you haven't got it. The comments about your resume and your general wonderfulness are nice, but not relevant to the logic. Try again.
 - B: Yes. This gives you the main point and reason, without the kindly remarks about how great you are. You can see that pure logic without any rhetoric could be very annoying!
 - C: No. The "premises" here include the word "but" -- which indicates a contradiction. One statement leads to one conclusion (you're hired!) and the other leads to another conclusion (you're not hired!). This should show you that you've included a statement here that is not part of the logical outline. The

writers may indeed have been very interested in your application, but that's not their main point in writing, is it?

- 8. A: No. One of these statements does not provide a reason for accepting the conclusion; can you spot it?
 - B: No. The premises about borrowed music and boring lyrics don't support the idea that blues and folk singers have already done all this. Try again!
 - C: Yes. You could also have included the comment that blues and folks singers have done it all before, but that wouldn't really support the conclusion that it's crummy music; it would only show that it's not all that original. You are right that these statements are not part of the logical outline!
- 9. A: Yes. Good! You left out the part about how rap can be nasty and boring, and went straight for the main point and the supporting reasons.
 - B: No. The quality of other music doesn't prove that rap has energy; nor does the fact that rap is like other music prove that it tells good stories. Try again!
 - C: No. You're almost there, but look at the second premise--is it really one point? And the conclusion isn't really stated by the speaker in so many words. Try again.
- 10. A: No. The comment about something being wrong with you is not the main focus of this argument. What is the speaker really saying? Try again!
 - B: No. You're getting there, but look at your premises. Do you really need both of these?
 - C: Yes. Ultimately, the premises boil down to the comment that the water is dangerous.

Click here to return to the exercise.

Answer Key for Exercise 2

Standard form (you may have some variation, but it should be something like this):

- Premise 1: Parents are the only people who can make such moral choices on behalf of their own families.
- Premise 2: There really isn't much evidence that violence and sex on television causes criminal behavior.
- Premise 3: Maybe we do children no favors by protecting them from every ugly thing we see.
- Premise 4: The family is always the first and most important influence a child has.
- Conclusion: Rather than ask executives to make such choices on our behalf by censoring "unsuitable" programs, parents should exercise this control themselves by hitting the "Off" switch.

Click here to return to the exercise.