

Critical Thinking Tutorial 1 solutions

Read each of the following passages and say whether they contain an argument. If you think a passage does contain an argument, what is the main conclusion?

1. The World Bank defines extreme poverty as not having enough income to meet the most basic human needs for adequate food, water, shelter, clothing, sanitation, health care and education. They have calculated that the number of people living in extreme poverty by this definition is 1.4 billion.

(Adapted from Peter Singer, *The Life You Can Save: Acting Now to End World Poverty*)

Argument? **No**

This is not an argument, since no attempt is made to justify a claim. Instead there is a definition, followed by a statement of how many people live in 'extreme poverty' according to that definition.

2. One of the simplest and most effective ways of learning for an exam is to test yourself repeatedly. It's important to pace yourself too by revisiting material rather than cramming it all in during a single session.

Argument? **No**

This is not an argument, since although various statements are made, none of them are supported by evidence.

3. Native forests are being cleared to make way for oil palm plantations. The oil from this tree is a major source of income for farmers in developing countries. But logging and burning native forests produces large amounts of carbon dioxide. **Therefore**, wealthy countries wishing to reduce the total amount of carbon dioxide in the atmosphere should pay developing countries not to cut down native forests. (Editorial: 'The other oil problem', *Scientific American*, Dec. 2012, page 6)

Argument? **Yes**

Premises:

1. Native forests are being cleared to make way for oil palm plantations.
2. The oil from this tree is a major source of income for farmers in developing countries.
3. Logging and burning native forests produces large amounts of carbon dioxide

Conclusion: Wealthy countries wishing to reduce the total amount of carbon dioxide in the atmosphere should pay developing countries not to cut down native forests

4. Economic forecasting has a very poor track record. Over the past sixty years, economists have consistently failed to predict many major economic events such as recessions and expansions. These failures to accurately predict what economies will do suggest that governments and business should not rely on economic forecasts. (C. Nelson, "The Dismal Track Record of Economic Forecasts". <http://www.prophetsprofit.com.au/dismal.htm>)

Argument? **Yes**

Premises:

1. Over the past sixty years, economists have consistently failed to predict many major economic events such as recessions and expansions.
2. Economic forecasting has a very poor track record.

Conclusion: governments and business should not rely on economic forecasts

Note that 1 provides support for 2 in this argument. So this argument contains a **sub-argument** – an argument for a premise.

5. ... the common perception of criminal actions is that they are abnormal and require punishment. Sociologically, however, it may be argued that crime is both normal and necessary. Crime is 'normal' in the sense that if we look at all societies, past and present, we always find criminal or 'deviant' behaviour which meets with some form of punishment or sanction. Crime is 'necessary' in the sense that any behaviour we define as punishable also serves to define the boundaries of what is acceptable and unacceptable behaviour, and that such boundary definition is fundamental to social order. (From *Sociology: Australian Conventions*, Ray Jureidini and Marilyn Poole (eds.), p. 23)

Argument? **Yes**

Premises:

1. If we look at all societies, past and present, we always find criminal or 'deviant' behaviour which meets with some form of punishment or sanction.
2. Any behaviour we define as punishable also serves to define the boundaries of what is acceptable and unacceptable behaviour, and that such boundary definition is fundamental to social order

Conclusion: Crime is both normal and necessary in any society.

The reasoning involved here is actually quite complex. There is an argument first for the conclusion that crime is a 'normal' feature of society. Then there is another argument for the conclusion that crime is a necessary feature of society. From those two conclusions we get the main conclusion above: 'Crime is both normal and necessary in any society'.

6. **Social websites harm children's brains: Chilling warning to parents from top neuroscientist.**

Social networking websites are causing alarming changes in the brains of young users, an eminent scientist has warned. Sites such as Facebook, Twitter and Bebo are said to shorten attention spans, encourage instant gratification and make young people more self-centred. Baroness Greenfield, an Oxford University neuroscientist and director of the Royal Institution, believes that exposure to computer games, instant messaging, chat rooms and social networking sites could leave a generation with poor attention spans.

Lady Greenfield told the Lords a teacher of 30 years had told her she had noticed a sharp decline in the ability of her pupils to understand others. 'It is hard to see how living this way on a daily basis will not result in brains, or rather minds, different from those of

previous generations,' she said.

She pointed out that autistic people, who usually find it hard to communicate, were particularly comfortable using computers. 'Of course, we do not know whether the current increase in autism is due more to increased awareness and diagnosis of autism, or whether it can - if there is a true increase - be in any way linked to an increased prevalence among people of spending time in screen relationships. Surely it is a point worth considering,' she added.

(From the *Daily Mail* newspaper, UK, Feb. 2009)

Argument? **Yes**

Conclusion: Social networking websites are causing alarming changes in the brains of young users (in particular, poor attention spans and possibly, autism)

Premises:

1. A teacher of 30 years noticed a sharp decline in the ability of her pupils to understand others.
2. Autistic people, who usually find it hard to communicate are more comfortable using computers and there has been an increase in autism and an increased prevalence among people of spending time in screen relationships.

The evidence mentioned here is extremely weak. One teacher's causal observations are not enough to draw any reliable conclusions from. And the fact that autism and internet usage have both increased does not by itself show that the increase in autism has been caused by the increase in internet usage. (A point which Greenfield acknowledges in the last sentence).

Exercise 2

Premise and conclusion indicators have been highlighted. Claims that have been modified from the original text to make them into complete sentences have been underlined.

(1) If Joe is a citizen or a permanent resident, he will pay less tax. But Joe is not a citizen, so he will not pay less tax.

1. If Joe is a citizen or a permanent resident, he will pay less tax.
2. Joe is not a citizen.

Therefore:

C. Joe does not pay less tax

(2) People who are old enough to fight for their country are old enough to vote for the people who make decisions about war and peace. **Therefore**, this government should allow 17 year olds to vote, since they clearly regard 17 year olds as old enough to fight.

1. People who are old enough to fight for their country are old enough to vote for the people who make decisions about war and peace.
2. This government clearly regards 17 year olds as old enough to fight.

Therefore:

C. This government should allow 17 year olds to vote.

(3) Does God exist? **There are reasons for thinking not.** For if God exists, a perfectly good and all powerful being exists. But if a perfectly good and all powerful being exists, there would be no suffering or evil in the world. And of course there is.

1. If God exists, a perfectly good and all powerful being exists.
2. If a perfectly good and all powerful being exists, there would be no suffering or evil in the world
3. There is suffering and evil in the world.

Therefore:

C. God does not exist

(4) **There are several reasons why** the Australian Government should not give handouts to the car industry. If Australian car manufacturers are not successful, it is not the responsibility of the Australian taxpayer to pay money for them to become more innovative and creative. **Secondly**,

the car industry is not a major employer in Australia. It employs only about 50,000 people, compared to over 100,000 employed in mining for example. Rather than try and prop up the ailing manufacturing industry, the Australian Government would be better off creating new jobs in clean energy.

1. If Australian car manufacturers are not successful, it is not the responsibility of the Australian taxpayer to pay money for them to become more innovative and creative.
2. The car industry employs only about 50,000 people, compared to over 100,000 employed in mining.
3. The car industry is not a major employer in Australia.
4. Rather than try and prop up the ailing manufacturing industry, the Australian Government would be better off creating new jobs in clean energy.

Therefore:

- C.** The Australian Government should not give handouts to the car industry

Note that 2 supports 3 in this argument.

(5) Put the passages you identified as arguments in Exercise 1 into standard form.

1. Native forests are being cleared to make way for oil palm plantations.
2. The oil from this tree is a major source of income for farmers in developing countries.
3. Logging and burning native forests produces large amounts of carbon dioxide.

Therefore:

- C.** Wealthy countries wishing to reduce the total amount of carbon dioxide in the atmosphere should pay developing countries not to cut down native forests.

1. Over the past sixty years, economists have consistently failed to predict many major economic events such as recessions and expansions.
2. Economic forecasting has a very poor track record.

Therefore:

- C.** Governments and business should not rely on economic forecasts

1. If we look at all societies, past and present, we always find criminal or 'deviant' behaviour which meets with some form of punishment or sanction.
2. Any behaviour we define as punishable also serves to define the boundaries of what is acceptable and unacceptable behaviour, and that such boundary definition is fundamental to social order

Therefore:

- C.** Crime is both normal and necessary in any society.

1. A teacher of 30 years noticed a sharp decline in the ability of her pupils to understand others.
2. Autistic people, who usually find it hard to communicate are more comfortable using computers
3. There has been an increase in autism
4. There is an increased prevalence among people of spending time in screen relationships.

Therefore:

- C.** Social networking websites are causing alarming changes in the brains of young users.