## Philosophy 1104: Critical Thinking

## **Answers to Practice Quiz #1**

1. Which of the following pairs of propositions are consistent? (Write just 'Yes' or 'No' in the column provided.) If you think that the propositions, while consistent, have strong negative relevance to each other, then also write 'SNR'. [10 marks total]

	A	В	Consistent? (Yes/No)
(i)	Mike isn't a biology student	Mike is a student	Yes
(ii)	The government says that there is nothing to worry about	There is something to worry about	Yes
(iii)	Dave has never been sailing	Dave knows the name of everything on a sailboat	Yes
(iv)	Lake Baikal is the deepest lake in the world	Lake Malawi in east Africa is deeper than Lake Baikal	No
(v)	Erik is a lawyer	Johanna was born in Germany	Yes
(vi)	Most cyclists also drive a car	Hardly any car drivers also cycle	Yes
(vii)	Most Texans own guns	Jake, a Texan, doesn't own a gun	Yes
(viii)	Seniors are high-risk drivers	Senior drivers have lower risk than teenage drivers	Yes
(ix)	Alex is generally very honest	Alex lied about his ex-girlfriends	Yes
(x)	Australia is the world's largest island	Australia is a continent, not an island	No

2. In the statements below, the speaker claims to find an anomaly or contradiction. In each case say whether the anomaly is serious or trivial, i.e. whether it threatens the general truth of the account. Briefly explain your judgement. (If you think that additional information is required to make this judgement, then briefly explain why.) [3 marks each part]

According to the theory of 'Continental Drift', the continental land masses are drifting around the globe at a rate of a few centimetres per year, which adds up to thousands of kilometres over the geological timescale of hundreds of millions of years. Wegener for example sees the continents as "ploughing" through the ocean crust, like a ship cutting through sea ice. The problem with this is that it contradicts the fact that the ocean crust is actually denser than the continental crust. There's just no way that the continents could slice through it.

## Answer:

This anomaly concerns the *mechanism* for drift that Wegener proposes, rather than the basic idea of the continents moving. Conceivably, the continents could move without smashing a path through the ocean crust. (Maybe the crust itself is shrinking and expanding?) Since the anomaly doesn't directly address the basic idea of drift, it is (somewhat) trivial.

Mainstream geologists believe that the continents are fixed in place and cannot move. This assumption gives rise to a number of anomalies, however, such as the rather striking fact that the world's continents approximately fit together, like the pieces of a jigsaw puzzle. Also, when you look at the animals and plants along these matching coastlines (now separated by thousands of miles of ocean) you find that they are astonishingly similar. This proves a common origin for these creatures, but how could they have crossed such a vast ocean? Such anomalies prove that these continents were once joined together.

## Answer:

These anomalies arise from the basic idea that the continents are fixed. If the continents don't move, then it's an amazing coincidence that the geology and fauna match. It's hard to think of an alternative explanation, so it looks serious.

3. In July 2011 the *Huffington Post* published a story "Why '100% Orange Juice' is Still Artificial". The author claimed that orange juice is no more nutritious than soda, and contains just as much sugar. Also, the juice is initially stripped of oxygen to make it last for up to a year in giant tanks. However, since this juice now has no flavour, before sale a 'flavor pack' of chemicals is added to it. The Florida Department of Citrus responded:

Purchased by nearly 70 percent of American households, people choose 100 percent orange juice for its great taste and nutrition benefits. By utilizing state-of-the-art technology, Florida is able to provide a consistent supply of high quality orange juice year round. By law, 100 percent orange juice is made only from oranges. The basic principle of orange juice processing is similar to how you make orange juice at home. ... During processing, natural components such as orange aroma, orange oil from the peel, and pulp may be separated from the orange juice. After the juice is pasteurized, these natural orange components may be added back to the orange juice for optimal flavor.

Underline and number any aspects of the statement above that appear slippery, and might be intentionally misleading. (Briefly explain what's fishy about it.) [6 marks]

- 1. People think OJ is nutritious, but that doesn't mean it is nutritious.
- 2. Similar? How similar? (vague language) Seems rather different as well.
- 3. "may" suggests it only happens sometimes, but it doesn't technically say this.
- **4**. Are you convinced by the following argument? Briefly explain your answer. [2 marks]

People who talk about the dangers of motor vehicles are just out of date. In G8 countries, for example, deaths and injuries for vehicle occupants are less than half what they were 30 years ago.

Looks like cherry picking. What about poor countries? What about pedestrians hit by cars? Also, half of a big number would still be a big number.

5. Comment on the suitability of the study's definition of the level of 'cycling safety' of a city. How suitable is it, for its purpose? Briefly explain your answer. [4 marks]

A new study finds that Vancouver is BC's least safe city to cycle in. The level of safety in a city was measured by the number of ICBC claims involving cyclists between 2012 and 2016. Vancouver 'tops' the list with 2,157 claims, well ahead of Victoria (413), Surrey (410) and Richmond (265).

Answer: Poor definition of safety, since cities with a lot of cycling will tend to have more cycling accidents, even if the risk is the same.

**6.** Underline and number three possibly misleading parts in the following paragraph, especially related to *ambiguity*, *vagueness*, *weasel words*, etc. In each case briefly explain what the problem is. [6 marks]

Our research has proven a statistical link between consumption of diet sodas and obesity, suggesting that heavy consumption of diet soda may increase the risk of obesity by as much as 20%. For the sake of public health, we urge that a new policy is needed concerning diet soda.

- 1. "statistical link" is vague
- 2. "may". Weasel word
- 3. "as much as 20%" It could be 1%, or even 0%, then.
- 7. In the following text, <u>underline</u> each term or phrase that has a positive connotation. Suggest replacements that *have similar meaning* but either neutral or negative connotation, writing them above the original words or phrases. [4 marks]
- (i) My dad is <u>challenging</u> (<u>invigorating</u>) to live with. He gets up <u>at an ungodly hour</u> (<u>bright and early</u>) and with my room being next to the bathroom I'm <u>jolted awake</u> (<u>woken</u>) each morning by <u>his ear-splitting</u> (<u>powerful</u>) singing in the shower. He <u>obstinately insists on making me</u> (<u>is determined to make me</u>) breakfast every morning, which is invariably something <u>dull</u> (<u>plain</u>) as well as very <u>heavy</u> (<u>hearty</u>) and slow to digest (<u>that keeps me full for hours</u>).
- (ii) In the following text, <u>underline</u> each term or phrase that has a negative connotation. Suggest replacements that *have similar meaning* but either neutral or positive connotation, writing them above the original words or phrases. [4 marks]

Translink is proposing to impose (introduce) yet another tax (a new levy) on Metro Vancouver residents, with the Orwellian name 'mobility pricing'. If they get their way (the measure passes), drivers will again be punished (be charged), apparently to force them out of their cars (encourage them to use other modes of transportation) It won't work, so drivers will end up being gouged (paying a fee) just to pay (to pay) for more buses and trains, so that society's losers (low income people) can travel around on my dime (with the taxpayer's support).

**6**. For this exercise, assume that the following passage about Stalin is true. In your answers, feel free to cherry pick, and alter the connotation of words as required for the purpose.

Joseph Stalin (1878-1953) was the dictator of the Union of Soviet Socialist Republics (USSR) from 1929 to 1953. Under Stalin, the Soviet Union was transformed from a peasant society into an industrial and military superpower. However, he ruled by terror, and millions of his own citizens died during his brutal reign. Born into poverty, Stalin became involved in revolutionary politics, as well as criminal activities, as a young man. After Bolshevik leader Vladimir Lenin died, Stalin outmaneuvered his rivals for control of the party. Once in power, he industrialised farming, which involved seizing land from wealthy farmers, who were executed or sent to forced labor camps. At the start of World War II, Stalin initially made a pact with Hitler. After Hitler betrayed him, however, Stalin aligned with the United States and Britain, and his armies were largely responsible for destroying the Nazi war machine and winning the war. After the war he took control of Eastern Europe, installing repressive communist governments controlled by Moscow.

(i) Write a true biography of Stalin that makes him look good. [3 marks]

Stalin was the powerful leader of USSR who transformed the USSR from a peasant society into an industrial and military superpower. Born into poverty, Stalin became involved in politics as a young man, and succeeded Lenin as leader of the party. During World War II Stalin aligned with the United States and Britain, and in fact Stalin saved the free world by destroying the Nazi war machine.

(ii) Write a true biography of Stalin that makes him look bad. [3 marks]

Joseph Stalin was the dictator of the Union of Soviet Socialist Republics (USSR) from 1929 to 1953. He ruled by terror, and millions of his own citizens died during his brutal reign. Stalin was a criminal from a young age, and after Lenin died, Stalin seized control of the party. At the start of World War II, Stalin joined forces with Hitler. After the war he took control of Eastern Europe, installing repressive communist governments controlled by Moscow.