For each of the questions, find one source that would **not** be impartial.

- 1. Are Macs better than PCs?
- 2. Do laws requiring background checks at gun stores reduce crime?
- 3. Do vaccines cause autism?

For each of the questions, find two informed impartial sources.

- 1. Where was your Great-grandmother born?
- 2. What are the best restaurants in Miami?
- 3. What caused the collapse of the Soviet Union?

Evaluate how well these arguments use of impartial, informed, cross-checked sources. If they did not make good use of the sources, how could the argument be improved? (100~200 words)

- 1. Massimiliano Vasile, an aerospace engineer at the university of Glasgow, spent two years comparing nine different technologies that could be used if an asteroid were on a collision course with earth. Dr. Vasile's Study revealed that it would be a bad idea to blow up an incoming asteroid with nuclear weapons. Thus, blowing up earth-bound asteroids with nuclear weapons is a bad idea.
- 2. When President Trump nominated Brett Kavanagh to the U.S. Supreme Court, a psychology professor name Christine Blasey Ford testified before the US Senate that Kavanagh had sexually assaulted her when they were in high school. Kavanagh then testified before the Senate, furiously insisting that he was innocent. After the hearing, more than 2,400 law professors sign an open letter, published in the *New York Times*, asserting that Kavanagh's testimony showed that he lacked the calm, courteous, even-handed temperament that a judge needs to have to hear and decide cases fairly. Therefore, Kavanagh lacked the temperament needed to sit on the Supreme Court.
- 3. Fox Glacier in Franz Josef Glacier in New Zealand both attract thousands of tourists each year. According to two companies that run glacier tours there, both glaciers have retreated so quickly over the last few years that once popular hiking trails have become impossible. The only way to access the glaciers now is by taking (a much more expensive) helicopter ride.

For each of the following correlations list at least two possible explanations for the correlations.

- 1. The GRE is an exam used for graduate school admissions. Philosophy students tend to do extremely well on all section of the test—especially the Verbal reasoning and analytic writing sections. That is, there is a correlations between studying philosophy and doing well on the GRE.
- 2. When the leaves on the tree turn colors, geese always fly south. That is, there is a correlation between the leaves turning colors and the geese flying south.

3. The Dow Jones index of the stock market correlates with the hemlines of woman's skirts and dresses. When the stock market goes up, so do hemlines: woman tend to wear shorter skirts. When the stock market does down the hemlines drop too.

Evaluate how well these argument about cause separate correlation from causation, then working towards the most likely explanation, while also accounting for complexity. If these arguments do not do a good explaining the causation, then how can they be improved? (100~200 words)

- 1. Based on a study of 26,069 Canadian adolescents, researchers at McGill University found that eating dinner together as a family promotes better emotional health among teenagers. Teenagers' emotional well-being, trust in others, and overall life satisfaction improve with each additional dinner they ate with the family during the week.
- 2. North Carolina teacher Donna Gill Allen teachers her students about germs with a fun experiments that use three slices of bread. She slides the first slice into a plastic bag using a plastic glove. She puts the second slice into a second bag using bear, but well-washed hands. She takes the third slice and passes it around the room so that each student touches it with their unwashed hands before putting it into a third bag. Within a few days, the third slice is covered in mold and slime while the first two slices still look good enough to eat. Since the only difference between the slices is the way they were handled, and we know that kids hands have germs on them that could cause the growths on the bread, the best explanation is that the kids touching the bread caused it to grow mold.
- 3. The word use for tea depends, of course, on the language you speak. But the word your language uses for tea depends, surprisingly on whether tea first arrived in your country by land or by sea. In most dialects of Chinese, the word for tea is something like *cha*. In languages that originated along the silk road—the old, land-based trading route that carried goods through central Asia to and from China—the word for tea sounds like *cha*: *chay* in Persian and Turkish, *chāy* in Hindi, s*hay* in Arabic, *chai* in Swahili, and so on. But in the Min Nan dialect of Chinese, spoken in the coastal Fujian province, tea is called *te* not *cha*. Cultures that weren't well-connected to the silk road learned about tea when the Dutch brought it to them—and the local word for it—from Fujian by Sea. Thus, it's called *thee* in Dutch, *Tea* English, *tè* Italian *tèh* in Javenese, and *tii* in Moari, and so on.