

## Exercises for Tutorial 38. Three Common Fallacies

In the box below, please write a **definition of a fallacy** in your own words:

### Exercise 1

**Instructions:** For each numbered item below, explain the false cause fallacy when one is present. *Not all items will contain false cause fallacies.* If you do not think the item contains a fallacy, explain why not.

**Examples:**

- **Since the moon landing in 1969 there has been more crime in America. Putting a man on the moon just made people go crazy and start robbing each other.**

Answer: This is a false cause because there is no connection between the moon landing and an increase in crime. The increase in crime is probably caused by other things, like more poverty or drug use, or by a combination of many causes.

- **In 10 out of 10 studies with hundreds of subjects, done under controlled conditions, nearly everyone who took the drug Petromycin reported feeling dizzy. The drug probably causes dizziness.**

Answer: This is probably not a false cause fallacy. If the drug had the same effect on hundreds of people in all of these studies, it probably does cause dizziness.

*Type or write in the answer boxes.*

1. After I ate a peanut butter sandwich and talked to Ron, I broke out in a rash. I think Ron gave me some kind of disease.

2. When Sally drives her red Ferrari, she likes to go as fast as possible. She also gets pulled over and ticketed by the police a lot more than when she drives her slow moving blue Ford Escort. She concludes that the police hate red cars.

3. During the months of January and February, the streets of San Francisco were not as crowded as they were during the months of June and July. This is probably because people are afraid of crime.

4. The auto shop did a complete check of everything about your car and came up with this explanation for why your car is not running: you're out of gas.

5. The ancient Bigoni people of Magnolia believed that rain would come only if they sacrificed seven sheep to the rain gods. They believed this because one time rain *did* come after they sacrificed seven sheep.

6. Virtually all cancer researchers agree that heavy smoking can contribute to lung cancer. Bob, who now has lung cancer, has been a chain smoker for most of his life. His smoking probably caused his cancer.

7. My baby grew hair first and then she grew teeth. I would say that hair causes teeth to grow in babies.

8. Almost every time we have had a President whose first name includes the letter "G," we have had a recession. That is why you should never vote for any candidate with a "G" in his name.

## Exercise 2

**Instructions:** Change any sentence below by correcting the order so that "because" or "since" come before the cause and not the effect. *Some sentences may already be correct.*

**Example:**

- It was an ugly house since nobody bought it.

Answer: Nobody bought the house since it was ugly.

Type or write in the answer boxes.

1. Because I need to drink coffee, I am tired.

2. There has been a huge increase in the number of immigrants to California because many people believe there are good jobs to be found in this state.

3. Sally stayed up all night writing and revising her paper since she got an A.

4. The Middle Ages is one of the least understood times in the history of Western civilization because few people kept good written records.

5. The 2006 Stanford study found that aspirin helps prevent heart disease because Sally takes a lot of aspirin.

### Exercise 3

**Instructions:** For each numbered item below, explain the hasty generalization fallacy when one is present. *Not all items will contain this fallacy.* If you do not think the item contains a hasty generalization, explain why not.

**Example:**

- Sally brought home a fuchsia plant for her garden and in three weeks it had died. She concludes that fuchsias cannot survive in her garden.

Answer: Hasty generalization: One fuchsia is not a large enough sample to decide that all of them will die in the backyard.

Type or write in the answer boxes.

1. A survey showed that most Americans think the economy is doing better than ever. The survey was taken in one of the wealthiest areas of California.

2. A freshman student attending Stanford sees a snake on campus during her first day. She writes home that “this place is crawling with reptiles. I’ll probably be dead of snakebite in a week or so.”

3. Sally went to Paris for a week in August and was insulted by a waiter. She concluded that “Europeans are rude jerks.”

4. During the late 1980s medical researchers throughout the world began to see a massive increase in cases of HIV and AIDS among people who reported no homosexual experience. The researchers concluded that “it is not accurate to label HIV a ‘gay disease.’”

5. There is no point in voting because all politicians lie. Richard Nixon lied, and he was President.

6. All of my friends think math is boring. Everyone knows math is boring.

7. My cat is a sweet animal who wouldn’t hurt a soul, so I don’t see why I should worry about petting that mountain lion. It’s just a big kitty!

8. According to a commercial for Wiggles gum, “Four out of five dentists surveyed said they recommended Wiggles to patients who chew gum.” Research revealed that the Wiggles Corporation surveyed only five dentists and paid four of them \$10,000 for their participation.

## Exercise 4

**Instructions:** For each numbered item below, explain the personal attack fallacy when one is present. *Not all items will contain this fallacy.* If you do not think the item contains a personal attack, explain why not.

**Example:**

- **Sally and Shelia are arguing about a court case:**

**Sally: I think the defendant looks exactly like the kind of man who would slap a soccer coach in the face with a wet fish. He is obviously guilty of fish-slapping.**

**Shelia: I don't think you can make a judgment based on his looks. You should listen to the evidence first.**

**Sally: You always trust people. That is why you married such a liar.**

Answer: Personal attack fallacy. Sally attacks Shelia's character rather than responding to Shelia's claim.

*Type or write in the answer boxes.*

1. Doctor Martin, an astronomer from Magnolia University, is an expert on comets, but he also was arrested for smoking marijuana in a hot air balloon, so I don't see why we should read his textbook on comets in the solar system. He was probably stoned when he wrote it.

2. Defendant in a court case: I was not at the scene of the crime, so I could not have committed it.

Prosecuting attorney: Aren't you a member of the Church of Mixology, a cult group?

3. Martin Sinder is one of the major "scientists" who claims that global climate change is not happening, but Sinder has never published a scientific article, has no scientific degrees, and offers no evidence that other scientists consider valid. I do not think we should trust his "scientific" claims.

4. Jean Paul Minzer wrote a book about how to lead a happy life, but one reviewer said that Minzer himself was overweight. I am sure not going to read that book.

5. I had Professor Sneed last semester, and he gave me an “F” even though I handed in two of the six essays required and came to about half of the classes. You should not take this teacher—he hates students!

6. Dr. Lee loves awful science fiction movies like “The Day After Tomorrow,” so I do not really trust his medical judgment.

7. We have proven that candidate Sneer lied many, many times when he was a senator, and now he wants to be President. Why should we believe he will not just keep lying?

8. Bill: You said we would alternate who does the dishes; I did them last night, so it is your turn.  
Gus: You always attack me! I pay my rent on time every month! You hate me!

## Exercise 5

**Instructions:** Each numbered item below may contain one of the fallacies you have reviewed in this tutorial. For each item, identify the fallacy and write a brief explanation as you have done in all of the previous exercises. *Not all items will contain a fallacy.* If you do not see a fallacy, explain why you don’t think the item is a fallacy. *Type or write in the answer boxes.*

1. You should never go out in San Mateo at night. A person was shot there one night last year.

2. Sally complained that “all of my best friends can’t stay married.” Of Sally’s five best friends, all have been divorced at least twice, and none are currently married.

3. Aristotle was a great thinker because he was Greek.

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4. Last semester, I started college with the highest test scores. I was a straight “A” student in high school. But then I flunked half my classes the first semester, after doing nothing but partying and watching T.V. Obviously, I am too stupid for college, and my teachers hate me.

5. A book called *The History of Christianity* was assigned in my history of religion class, but the author, Karen Artice, is not a Christian, so I am sure it is biased.

6. My next door neighbor says his party will not get out of control tomorrow night, but I do not trust him. He seems like a pretty hard-partying person.

7. Walking is the best form of exercise. I lost weight by walking, and my doctor says my blood pressure went down because of it.

8. You cannot vote for Nancy Marks for supervisor! She just became a citizen of the United States a few years ago.

9. Students want to get better grades in calculus because they study hard.

10. The one movie I saw by Rigoberta Lopez was very good. I am sure all of her other movies are great.

11. When I was a little girl, I quit eating meat for a whole week. I am sure I can quit smoking, drinking, and doing drugs with no problem.

12. When Albert was in Louisiana, he saw a white squirrel. He called his girlfriend and told her, “It is weird. All the squirrels in the South are white.”

13. Albert ate fried food every day for two weeks during his trip to New Orleans. He decided that the southern heat was making him break out in acne.

14. Professor Thomas has failed all of his students in basic math for the past six years while none of the other fifteen math professors on campus who taught basic math have failed more than a few. It is safe to say that Thomas is a tough teacher.

15. People who understand fallacies are smart. Now that you have completed this tutorial on fallacies, you can probably drop out of college.

16. John is very intelligent when it comes to understanding fallacies. He must get excellent grades in all his classes.