

## Homework 4

Your Name: \_\_\_\_\_

Student ID# \_\_\_\_\_

For this homework, you have only one problem. Read the instructions carefully!

1. Find a fallacy (invalid argument) on the internet.

I don't mean "find the name of a fallacy"—I mean you should find an actual argument that someone is making that is fallacious.

It can be on a blog post, a newspaper article, a forum comment, a product webpage, a wiki, or whatever.

It cannot be on a page about fallacies, and it cannot be identified as a fallacy on the page that it's on. You should be the one recognizing that it is a fallacy.

The fallacy need not have a name. You just have to find an invalid argument.

2. Quote the fallacy in your homework, and give me the URL. (If you handwrite it, please write neatly.)

3. Describe what makes the argument fallacious. What's wrong with the argument? You can give the name of the fallacy, if it has one, but make sure to also explain why the fallacy you identify is an instance of that type.

Example

I found this article on the Daily Mail (a horrible, tabloid paper from Britain):

<http://www.dailymail.co.uk/news/article-2212306/Olivia-Manning-Meet-schoolgirl-12-IQ-162--making-brainier-Einstein-Stephen-Hawking.html?ito=feeds-newsxml>

The article says:

“A 12-year-old schoolgirl has been accepted into Mensa after discovering she is brainier than both Albert Einstein and Stephen Hawking. Olivia Manning, from Liverpool, managed to get a whopping score in an IQ test of 162 - well above the 100 average. Her score is not only two points better than genius German physicist Einstein and Professor Stephen Hawking, but puts her in the top one per cent of intelligent people in the world.”

That’s a lie, because neither Einstein nor Stephen Hawking ever took an IQ test.

But lying is not a fallacy, it’s just morally wrong.

The article commits a fallacy when it assumes that having a higher IQ than someone means that you are smarter or “brainier” than them. This is an equivocation between IQ, “intelligence quotient”, which is just a name for a score on a test, and intelligence, which is not a score on a test. Having a high intelligence is not the same thing as having a high score on an IQ test.

The article also commits the base rate neglect fallacy. The base rate of people who are smarter than the smartest physicists of the past 100 years has to be very low, maybe at 1 or 2 in a billion. IQ may be a passable test for intelligence, but about 0.1% of people who take the test score as high as Manning. Since there are 7 billion people in the world, we expect 7 million people have IQ’s that high. So the chance that you’re smarter than Einstein given that you got Manning’s score is only about 1 or 2 in 7 million.

I’m sure that Manning is a bright, intelligent young woman. But scoring high on a test that Einstein and Stephen Hawking never took is not a good reason to believe that she is smarter than Einstein.