

MAT 1160 — WEEK 15

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Spring 2010

Sound Arguments

A **sound** argument is a **valid** argument whose **premises are true**.

A **sound** argument therefore arrives at a **true conclusion**.

Be careful not to confuse **sound** arguments with **valid** arguments.

Of course, we can criticize more than the mere **soundness** of an argument.

In everyday life, arguments are almost always presented with some **specific purpose** in mind.

As well as criticizing the argument itself, one can criticize the apparent **intent** of the argument.

Types of Fallacies

There are many types of fallacies, several of which are listed at: <http://www.csun.edu/~dgd61315/fallacies.html>

Here are five you will be expected to know for the final:

1. **Ad Hominem**
2. **Argumentum Ad Nauseam**
3. **Non Sequitur**
4. **Strawman**
5. **Sweeping Generalization**

Ad Hominem

An argument directed at the **person**, not their argument.

E.g.: “You’re just stupid!”

Attacking the **source** of information rather than the **argument**

– or –

pointing out that the other person stands to benefit from what they are advocating, without refuting their argument.

Argumentum Ad Nauseam

An argument to the point of disgust: i.e., by **repetition**:

Trying to prove something by simply saying it again and again.

Non Sequitur

Aka, “**It does not follow**”:

Stating as a conclusion something that does not follow strictly from the premises.

Strawman

Refuting a **caricatured** or **extreme** version of somebody's argument, rather than the actual argument they've made.

Often this fallacy involves putting words into somebody's mouth by saying they've made arguments they haven't actually made.

Sweeping Generalization

Making a sweeping statement and expecting it to be true of every specific case: i.e., **stereotyping**.

Sudoku Puzzles

One of each digit in every row, column, and block.

The ones in the newspaper are 9×9 , but the puzzles don't have to be that large.

Consider a 6×6 grid: you need the digits 1 – 6

Smaller Sudoku puzzles for practice can be found at:
<http://www.jigsawdoku.com/>