	Sound Arguments
MAT 1160 — WEEK 15	A sound argument is a valid argument whose premises are true.
Dr. N. Van Cleave	A sound argument therefore arrives at a true conclusion.
Spring 2010	
	Be careful not to confuse sound arguments with valid arguments.
N. Van Cleave, ©2010	N. Van Cleave, ©2010
	Types of Fallacies

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.

N. Van Cleave, ©2010

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.

1. Ad Hominem

3. Non Sequitur

4. Strawman

N. Van Cleave, ©2010

2. Argumentum Ad Nauseam

5. Sweeping Generalization

Argumentum Ad Nauseam

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

There are many types of fallacies, several of which are listed

at: http://www.csun.edu/~dgw61315/fallacies.html
Here are five you will be expected to know for the final:

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

N. Van Cleave, ©2010

N. Van Cleave, ©2010

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.

N. Van Cleave, ©2010

N. Van Cleave, ©2010

Sweeping Generalization

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

Sodoku Puzzles

N. Van Cleave, ©2010

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

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

Consider a 6 \times 6 grid: you need the digits 1 – 6

Smaller Sodoku puzzles for practice can be found at: http://www.jigsawdoku.com/

N. Van Cleave, ©2010