

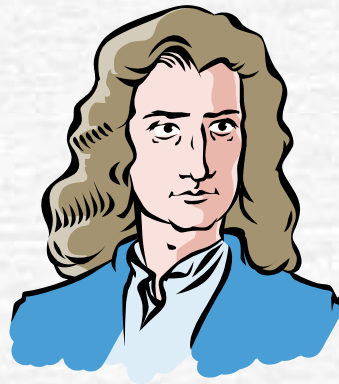
# BOOLEAN Operators and Truncations



# BACKGROUND

Boolean searching is based on a system of symbolic logic which was developed by George Boole, who was a 19<sup>th</sup> century English mathematician.

Most searchable computer databases support Boolean searching.



# USING BOOLEAN

When performing a Boolean search, you must first choose **keywords** that best describe your topic. Then you must connect the keywords using **operators**.




# BOOLEAN OPERATORS

- **AND** (narrows the search by retrieving only records containing both keywords used in the search statement)
- **OR** (broadens your search by retrieving either one or more of the keywords used in the search statement)
- **NOT** (excludes records containing the second keyword in your search statement)



✓ **ADJ** (Forces the computer to search for words in a specified order)

✓ **NEAR** (Retrieves items that have both terms in the same sentence. You can add a number to near to instruct the computer to find results within those numbers of words in any order)








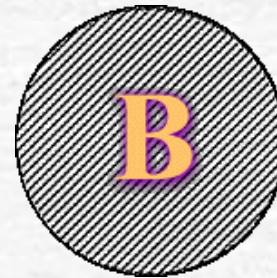
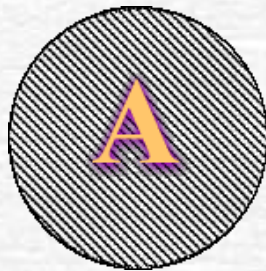
# The **AND** operator

**AND** links terms together in a way that makes your search more narrow. It tells the computer that you want records that contain all the words you specify.

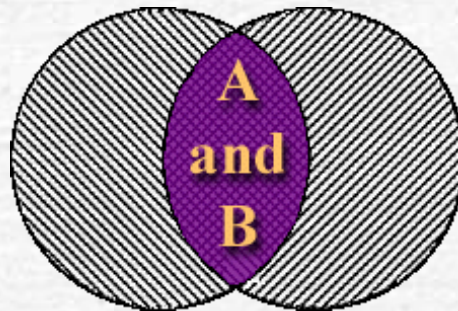
For instance, if you search only records containing the words "Library" and "Information," your results will return only those articles containing **BOTH** terms.



# AND



The purple space where they intersect represents all the records that would be returned by the search **Library and Information**





# The **OR** operator

**OR** broadens, or widens, your results.

For instance, a search on **Library Or Information** will give you records that not only have **both** Library and Information in them, but also the records that contain **only** Library and **only** Information.

Therefore, you will obtain more results by using the **OR** operator.





**OR**



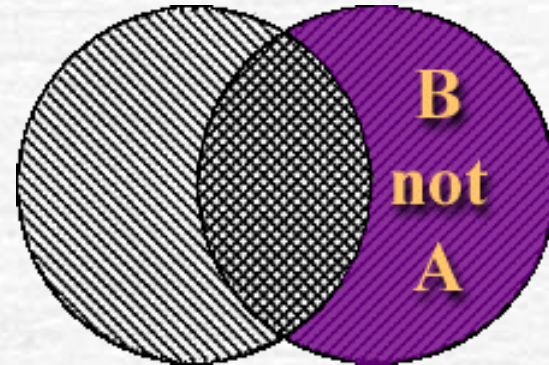
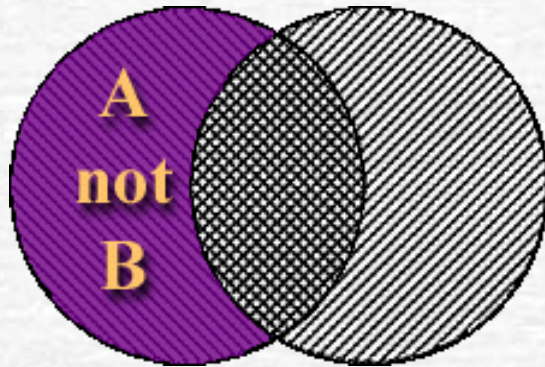
The purple space represents all the records that would be returned by the search "Library or Information."

# The **NOT** operator

**NOT** is a term that allows you to exclude, or eliminate, certain words from your search.



# NOT



The purple spaces represent all the records that would be returned by the search "**library not information**," and "**information not library**." Note that "**library not information**" gives much different results that "**information not library**."

# ADJ

Forces the computer to search for words in a specified order.

Will find results where *library* **immediately precedes** information.



# NEAR

Retrieves items that have both terms in the same sentence. You can add a number to near to instruct the computer to find results within those numbers of words in any order. (e.g alcohol **near** abuse or alcohol **near3** abuse)

This will retrieve results where alcohol is within 3 words of abuse.

i.e., "Men who *abuse* their wives after *alcohol* consumption" or  
"*Alcohol*consumption leads to *abuse*"

# Truncation (\*) symbol



Truncation is frequently represented by an Asterisk (\*). To use it, enter the root of a search term and replace the ending with an \*.

# Cont...

For example, **comput\*** will retrieve:

- compute
- computer
- computing
- computation, etc!

Many databases such as EBSCOhost use (\*) for truncation.  
Other databases may use other common truncation symbols  
such as (#) or (?)



# BOOLEAN MACHINE

Watch to see how the results change by using different operators.

<http://kathyschrock.net/rbs3k/boolean/>





# References

- ☛ Bobst Library.

<http://www.nyu.edu/library/bobst/info/instruct/tutorials/boolean/tutorial.html>

- ☛ The Boolean Machine.

<http://kathyschrock.net/rbs3k/boolean/>

- ☛ Research Guides.

<http://www.lsc.cc.fl.us/library/guides/boolsea.htm>