

Using Boolean Terms in Your Search

Have you ever performed a search online and found that much of what you found wasn't what you were looking for at all? Have you spent hours leafing through search results that never seemed to address your specific need? Weeding out irrelevant items can be frustrating and a waste of time.

Luckily, most databases you use for online searching will allow you to use the Boolean operators **AND**, **OR**, and **NOT** to make your search as efficient as possible. These operators are named after George Boole, who designed a system of logic to explain the relationships between different terms and concepts. Using Boolean operators to combine your search terms will help you to find exactly what you're looking for and eliminate unwanted results.

The outcome of searches using **AND**, **OR**, and **NOT** to connect keywords is illustrated in *Figure 1* below. The overlapping circles represent the keywords in the search, and the shaded area illustrates the results of a search where those keywords are connected by a Boolean operator. These diagrams graphically show how using the **AND** operator narrows a search, **OR** broadens a search, and **NOT** excludes material from a search.

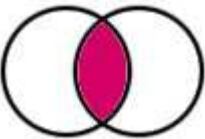
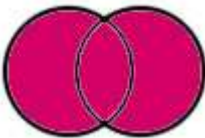
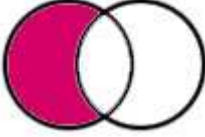
Operator	Example search	The search will find...	Results shaded
AND	Thailand AND history	items containing both "Thailand" and "history." AND narrows a search, resulting in fewer hits	
OR	teenagers OR teens	items containing either "teenagers" or "teens" or both. OR broadens a search, resulting in more hits	
NOT	mexico NOT "new mexico"	items containing "Mexico" but not "New Mexico." Caution! It's easy to exclude relevant items	

Figure 1: The results of using Boolean terms

*Please note:

Not every database allows you to use all of these operators, or the same version of the operator. For example, you may be able to use the operator **NOT** in one database, but will need to use another version of **NOT** (**AND NOT**, **ANDNOT**, or even a minus sign) in another. To find out which operators are accepted by the database you're using, please see the "Help" section provided by that database.

OTHER WAYS TO MAKE YOUR SEARCH MORE EFFICIENT

Truncation If you type the first part of a keyword (including the word root) and insert a “wildcard” symbol (usually *, but is sometimes ?, \$, or !) in place of the word ending, then your search will produce all the words that begin the same way but have various endings.

If you search for:

You will find:

Femini*

results that contain the word feminine, feminism, feminist . .

Athlet*

athlete, athletes, athletic . . .

Immigra*

immigration, immigrant, immigrants . . .

Phrase

If your search term consists of two or more words that only make sense if they are together in the exact same word order, then you are searching for a phrase. Quotation marks are used to hold words together as a phrase.

If you search for:

You will find:

“eating disorders”

results that contain the phrase “eating disorders” but not results that contain the word “eating” in one place, and the word “disorders” in another

“United States”

the phrase “United States,” but not results that have the word “united” in one place and “states” in another

Nesting

If you have a more complicated search, you can combine the above methods with parentheses.

If you search for:

You will find:

Indianapolis AND (baseball OR football)

results that mention Indianapolis and either sport

television AND (children OR youth OR teen*)

results related to television and young people

(Vietnam OR Vietnamese) NOT war

results about Vietnam but not the war