

# Boolean operators

The principle of Boolean logic lets you organize concepts together in sets. Any search engine can be searched using Boolean operators: OR, AND, NOT.

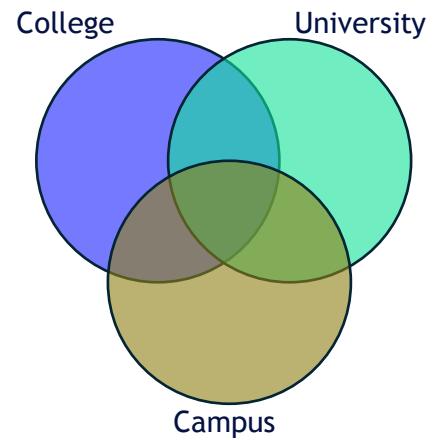
## OR

will broaden your search and retrieve records containing any of the words it separates, e.g. university OR college

Search terms	No. of results
college	460,502
university	510,802
college OR university	812,132

- This operator will retrieve all records that contain one term, the other term, or both of them.
- It is often used to combine synonyms or like concepts.
- The more terms or key words you search using the OR Boolean operator, the more results you will retrieve. It ensures you don't miss items that contain only one term.

Search terms	No. of results
college	460,502
university	510,802
college OR university	812,132
college OR university OR campus	899,556

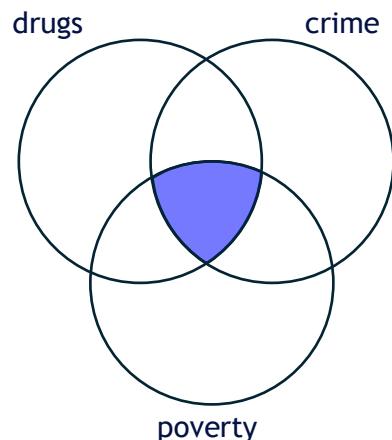


## AND

will narrow your search and retrieve records that contain all of the words it separates.

The AND operator is often used for linking together different concepts where all the three elements must be included in each record you retrieve.

Search terms	No. of results
drugs	107,033
crime	368,102
drugs AND crime	98,333
drugs AND crime AND poverty	1,118

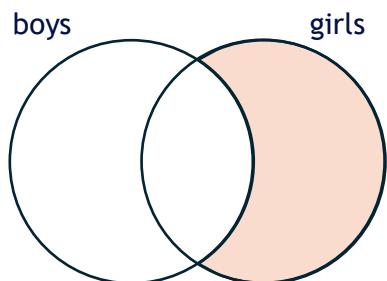


## NOT

will **narrow** your search and retrieve records that **do not** contain the term following it.

e.g. girls NOT boys = results retrieved will only contain the word 'girls'; additionally results will not be retrieved if they contain the word 'boys' even if the word 'girls' is also included.

Search terms	No. of results
girls	96,646
boys	133,432
girls NOT boys	68,332



## Examples: of combined AND and OR and NOT operators

- I need information about university students. Search: college **OR** university **OR** campus
- I am interested in crime among drugs addicts. Search: crime **AND** drugs
- I am interested in radiation, but not nuclear radiation. Search radiation **NOT** nuclear

