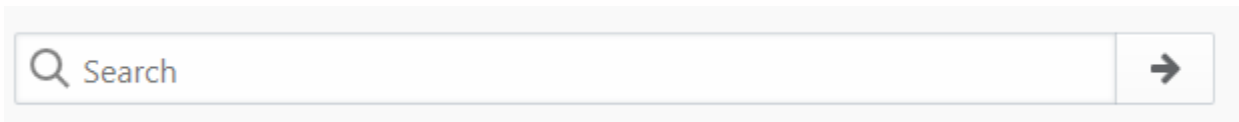


USING SEARCH ENGINES WITH BOOLEAN LOGIC

Search Engine

A search engine is a program that searches documents on the World Wide Web (internet) for key words, and returns a list of the documents where the key words were found. The search may find the key word in webpages, images, videos, and many other types of files.



A search bar with a magnifying glass icon, the text "Search", and a right-pointing arrow.

Boolean Logic

Boolean logic is the combining or elimination of search terms to broaden or limit a search.

1. AND

“AND” only returns pages with both the terms on them

A AND B

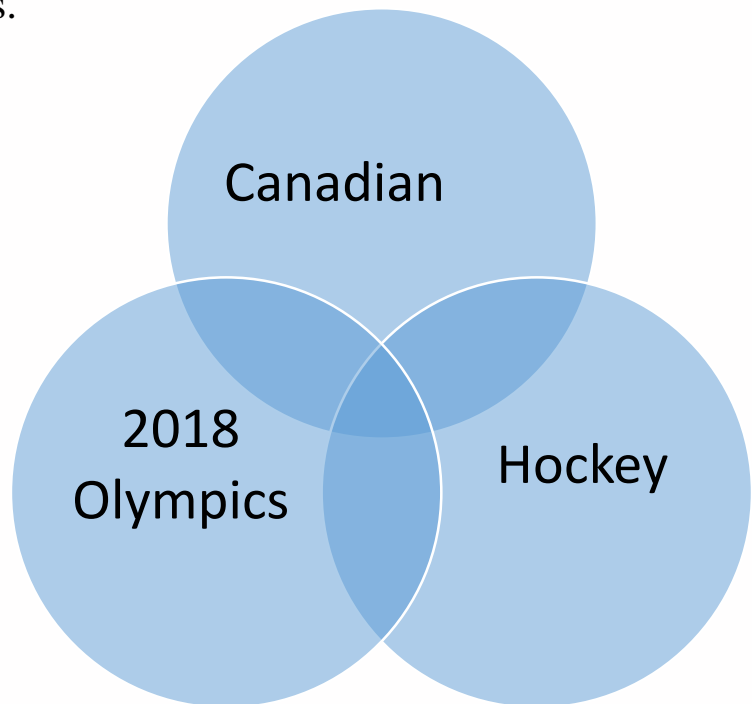
If you want to learn about Canadian hockey, for example, you would key Canadian AND hockey in a search engine. A Google search for the word Canadian alone brings up 556 million results, while a search for hockey alone brings up 298 million results. In order to narrow down our search field, key in the words Canadian and hockey, and that narrows it down to 143 million results. A “+” may also be used instead of AND. An example would be Canadian+hockey.



A Canadian+hockey search only shows results are about Canada and Hockey, represented in the above diagram by:



This search only finds the information that can be found in the venn diagram above where the red and blue circles meet. All of the red hockey results that is not touching the blue hockey results will not show up in this search. It won't show up because the red only section represents hockey web pages that are not about Canadians.



You can further focus your search by adding a third search term. Here the search is for Canadian and hockey and 2013 Olympics. This search brings up 62 million results. The information is represented in this venn diagram. The search term is limited to the information that can be found in the small area where the three colors all overlap. The rest of the information is ignored because it is missing either one or two of the criteria.

2. OR

The “OR” search term will return every page with either term. In other words a search of Canadian OR hockey OR 2013 Olympics will return every page in the venn diagram. Every page that has the word Canadian, every page that has hockey, and every page that has 2013 Olympics in it will be returned. Google returns over 6 million results. OR must be capitalized in Google.

3. NOT

Displays web sites that contain information on one thing, and not the other. Is written as:
Canadian –hockey.

4. Quotation marks

Keeps 2 or more words together, in the EXACT order. Ex: “British Columbia”

5. Wildcard *

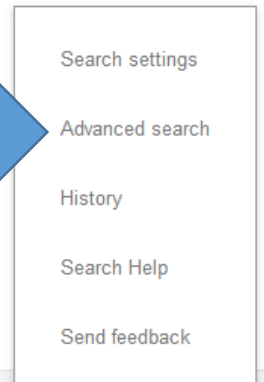
Look up variations of a word by entering the word stem followed by an asterisk *

Teach* will let you look up teachers, teaching, teaches...All at once. Typing in wom*n allows you to search for the word women and woman.

6. Another way to use Boolean logic is to use the Advanced Search in a search engine. In Google the Advanced Search can be found by clicking on the Settings link in the bottom right hand corner as shown below. Google may re-design their webpage any day and move the Settings link. The Advanced Search can also be found by doing a search “Advanced Search.”

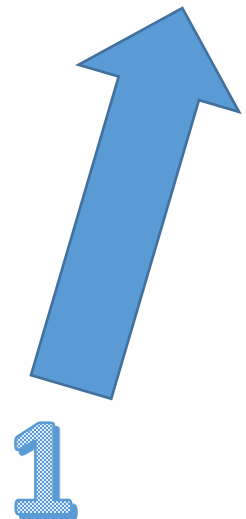


2



Privacy Terms Settings

1= the Settings link
2=Advanced Search



1

The Advanced Search in Google looks like this:



Advanced Search

Find pages with...

all these words:

To do this in the search box.

Type the important words: tri-colour rat terrier

this exact word or phrase:

Put exact words in quotes: "rat terrier"

any of these words:

Type OR between all the words you want: miniature OR standard

none of these words:

Put a minus sign just before words that you don't want:
-rodent, -"Jack Russell"

numbers ranging from:

 to

Put two full stops between the numbers and add a unit of measurement:
10..35 kg, £300..£500, 2010..2011

All of the text boxes that appear in Advanced Search can help a person refine their search. Take a look at the options and think about how using Advanced Search might help you find what you're looking for next time you do a search.

One of the handy drop down boxes in Advanced Search is the one called Last Update.

last update:

anytime

site or domain:

anytime

terms appearing:

past 24 hours

past week

SafeSearch:

past month

past year

file type:

any format

By using this drop down box you can be sure to filter your search so that you're getting recently updated pages on your topic. Click on Advanced Search in order to retrieve the results.

Advanced Search

Internet Search Assignment

1. Find 5 other popular search engines other than Google.
2. Pick one search engine. Describe three features that you find helpful about this search engine.
3. Compare one feature about a search engine that you find to be better than another search engine.
4. Describe one or more ways that this search engine can be improved
5. List one item you would like to search using this search engine. How many results did the search engine show? (The earlier example was the search for webpages on Canada).
6. List another item you would like to search using this search engine. This item should have some connection to the first item. How many results did the search engine show? (The earlier example was the search for webpages on hockey).
7. Use the Advanced Search in order to do your own advanced search of the items in questions 5 and 6. (The earlier example was the search for Canada+hockey). How many results did the search engine show?

Name _____

Assignment _____

Criteria	Met	Not yet met	I noticed/evidence of meeting criteria
-found 5 search engines other than Google			
-described three helpful features about one search engine			
-compared one search engine to another			
-described one way that a particular search engine can be improved			
-listed search results from one particular search			
-listed search results from a second particular search			
-completed an advanced search			
-listed search results from advanced search			

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