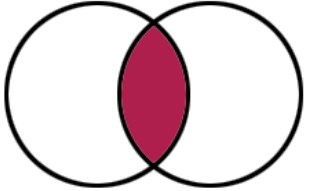
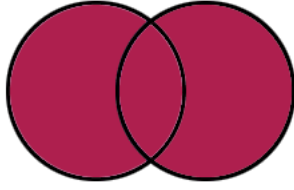
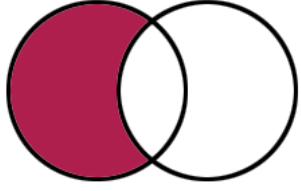


## Boolean Searching

Named after George Boole, a 19th Century English mathematician, Boolean logic is used to provide structure when performing database searches. Understanding when and how to use the search operators effectively can give you more control over your search strategy. Always be sure to find out what other types of search operators are available in a particular database that you are using.

There are three primary operators used in most databases:

<p><b>AND</b></p>	<p><b>Uses:</b></p> <ul style="list-style-type: none"> <li>Combine different concepts</li> <li>Narrow search results</li> <li>Create the <i>intersection</i> of search sets</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>List the most important concept first.</li> <li>The more criteria you add to a search, the smaller your search set will become.</li> </ul>	 <p>HIV <b>AND</b> Needle Exchange</p>
<p><b>OR</b></p>	<p><b>Uses:</b></p> <ul style="list-style-type: none"> <li>Account for synonyms</li> <li>Account for singular and plural forms</li> <li>Account for acronyms</li> <li>Create an either/or scenario</li> <li>Expand search results</li> <li>Create the <i>union</i> of search sets</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>If you are using lots of variations with the same word root, consider using truncation to account for these.</li> <li>Group your OR statements by using parentheses to ensure proper searching.</li> </ul>	 <p>(HIV <b>OR</b> AIDS)</p>
<p><b>NOT</b></p>	<p><b>Uses:</b></p> <ul style="list-style-type: none"> <li>Exclude concepts or search sets</li> <li>Narrow search results</li> </ul> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>Using NOT can remove potentially useful information, such as items that compare and contrast.</li> </ul>	 <p>Needle Exchange <b>NOT</b> Hepatitis</p>

Boolean operators can be combined to create more complex search strategies.

**Ex.**  
( (HIV **OR** Human Immunodeficiency Virus) **OR** (AIDS **OR** Acquired Immunodeficiency Syndrome) ) **AND** Needle Exchange **NOT** Hepatitis