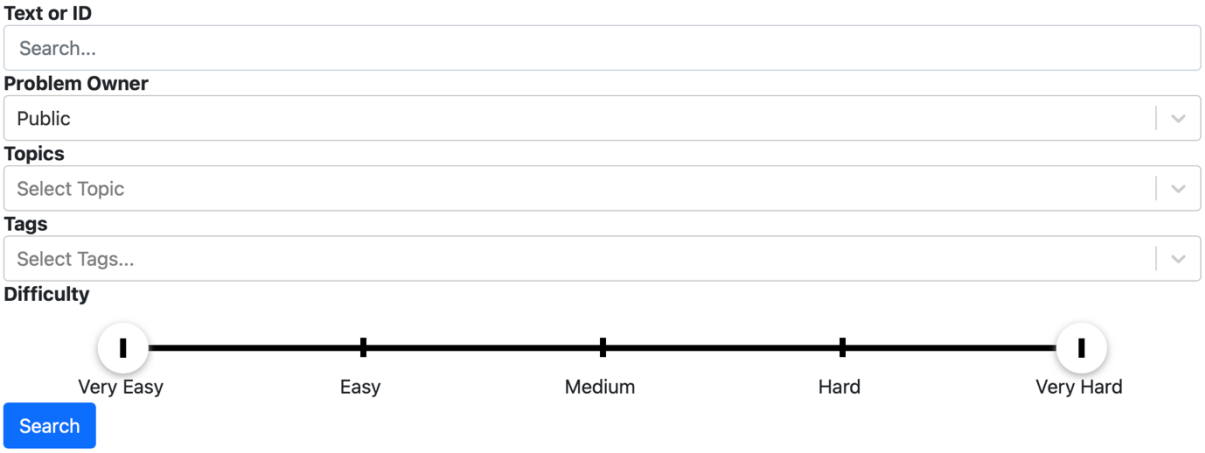
Searching the CalcPad Problem Library

One of the most convenient characteristics of our CalcPad program is the availability of a large collection of pre-made problems on various topics with varying levels of difficulty. Perhaps the most powerful characteristics of our CalcPad program is the ability to create your own problem sets from our pre-made problems and/or problems you have written. Understanding how to search for and quickly find existing problems will facilitate the task of creating your own problem sets. This document explains how to do it.

CalcPad problems are stored in the CalcPad Library. You can access the library in two ways.

1. Navigate to the page for one of your classes. Tap on the **CalcPad Library** button as found on your Class page.
2. Within the Assignment Builder, tap the **Add New Problem** button or the **Add Problem** (**+**) button to add a problem to a problem set. In the dialogue box, tap on the **Add Existing Problem** button.

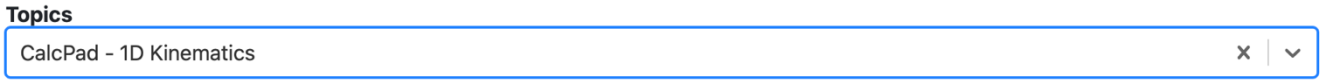
Method 1 allows you to search for problems, clone problems, and write problems. **Method 2** allows you to search for problems and add them to a problem set. Both methods open a Search window that includes a variety of controls for searching the CalcPad Library. The Search window is shown below.



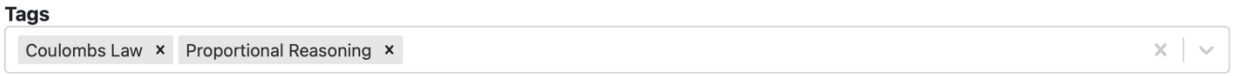
The **Problem Owner** field allows you to search for problems that are owned by The Physics Classroom (**Public**), owned by you (**Mine**), owned by other teachers in your subscription (**Subscription**), or all three owner types (**All**).

An easy way to find a problem is to search by its ID or its text using the **Text or ID** search field. Once you enter the ID of a problem or the text of a problem (e.g., NL4Q3), tap the **Search** button. You can enter a portion of a problem's name – like NL4Q – and find all problems that share "NL4Q" in the problem name; this particular search would return all problems from Problem Set 4 in the Newton's Laws chapter.

You can search by topic by selecting one or more of our available topics from the **Topic** pull-down menu. All problems that we have written for the selected topic will be returned in the search results.



All problems that we have written contain *tags*. You can use the **Tag** drop down menu to search for problems containing one or more tags. You can type a *random* tag into the search field; as you type, we will start searching for the tag and fill it the options as you type. Or you could simply select a tag from the tag pull-down menu. Consider using multiple tags to find what you want. For instance, you could use Coulomb's Law and Proportional Reasoning to find all problems that involve the use of proportional reasoning to solve Coulomb's Law problems.



You can use the **Difficulty** sliders to find only those problems of a particular range of difficulty. For instance, you could search a Topic (e.g., Newton's Laws for all the problems that have been designated by the owner as being either Hard or Very Hard.

Also consider combining various search attributes in your search. For instance, search for all problems that are tagged as F=m*a problems and use a kinematic equation that have a difficulty ranking of Hard or Very Hard.

When you conduct a Search, we will find any existing problems that match your search criteria and display the search results. If you have accessed the Search using **Method 1**, you can clone any problem not owned by you. This adds the problem to your CalcPad library and allows you to edit it. If you do not plan on editing the problem, there is no need to add it to your personal library. If you have accessed the Search using **Method 2**, you can select the problem to be added to your custom problem set.