

# Using DrScheme

## Setting up DrScheme

There are many versions of Scheme out there. 6.001 used different ones in different places. In order for the code in this class to work, though, we need to standardize on one version of Scheme.

This class will be done entirely using the [DrScheme](#) environment. You may have used DrScheme to do your projects in 6.001.

You should **not** use 6.001 Scheme or MIT Scheme to do the problem sets! If you do, you will get strange error messages, and the TAs will not be able to help you.

You run DrScheme on Athena like this:

```
add drscheme
drscheme &
```

You can also [download it](#) to run it on your own computer.

If you're running DrScheme for the first time, it will ask you to choose a dialect of Scheme. We're going to use PLT Scheme, also known as MzScheme. To set this up:

- Go to the **Language** menu and select **Choose Language...**
- In the list of languages, click on **PLT**.
- A few variants will drop down under PLT.
  - Choose the **Graphical** variant. (We used **Textual** before problem set 3.)

## The language

The MzScheme language we're working with inside DrScheme may be somewhat unfamiliar if you're used to working with MIT Scheme. Here are some of the most noticeable differences:

The empty list is **true**. In MIT Scheme, the empty list was false -- in fact, `()` and `#f` were the same value. In MzScheme, the only false value is `#f`.

Many functions are defined in *libraries* instead of being predefined everywhere. Perhaps the most useful one of these is `list.ss`, which provides `filter`, `foldl`, and `foldr` (the last two you may know better as `fold-left` and `fold-right`), as well as other useful things like `first through eighth` and `last-pair`.

A guide to using these libraries is available:

<http://download.plt-scheme.org/doc/352/html/mzlib/>