Using Geometer's Sketchpad

1. INTRODUCTION

These notes provide a very brief introduction to the use of Geometer's Sketchpad on the computers the MLC computer lab in Kidder 108.

2. GETTING STARTED

- Add the network place `\\poole\ClassFolders` .

  One way to do this is to double-click on `My Network Places` , then on `Add a network place` , which will open a wizard. You can browse for `poole` , or enter the above share name by hand. You may need to enter the fully qualified name `poole.scf.oregonstate.edu` rather than `poole` .

- Browse to `\\poole\ClassFolders\Math-Dray` .

  This directory contains class files and shortcuts you may need for some of the activities.

- Double-click on `Map Onid Drive` .

  This should mount your ONID home directory, so that you can save your work between sessions. There are several other ways to do this, which may depend on which computer you are using. ***When saving your work, make sure you navigate to your ONID directory.*** Files saved to `My Documents` will ***not*** be visible from any other computers on campus.

- Start Geometer's Sketchpad by double-clicking on `GSP 4.03` .

  Geometer's Sketchpad does not automatically have an icon on the desktop or in the Program Menu. Feel free to add one — Geometer's Sketchpad should live in `C:\Program Files\Sketchpad` . But realize that these shortcuts will only be available when you login to this computer.

3. USING GEOMETER'S SKETCHPAD

Most of the controls are straightforward. The icons along the left control the action of the mouse. The four icons in the middle allow you to insert points, circles, line segments, and text, respectively. For some of these choices, you may need to click and drag to construct the object.

Right-clicking on a single object allows you to set additional properties, such as color, thickness, and label. Selecting the text icon allows you to toggle whether and where a label is shown, or to insert text by double-clicking.

The power of Geometer's Sketchpad lies in its ability to make geometric constructions. After selecting some points and/or lines, open the `Construct` or `Measure` menus to see what the possibilities are.

You must have the appropriate number of objects selected in order to perform a given construction or measurement. Select the pointer icon and click on any object to toggle whether it is selected, or on empty space to deselect everything and start over (a good idea before starting any construction, especially at the beginning).

4. ASSIGNMENT

- Construct a triangle by hand. Now do it again, but this time use the `Construct` menu as much as possible. Measure all the sides and angles in either triangle.
- Construct another triangle such that two corresponding sides as well as the included angle are congruent.
- Check whether SAS congruence holds in this case by measuring the remaining sides and angles.
- (Optional) Use a similar construction to check whether SSS congruence holds.