

The Unit Circle – Accuracy is Key

Grades 10-12

Objectives	<p>Following this activity, students will be able to:</p> <ul style="list-style-type: none"> • Construct an accurate unit circle using Geometer’s Sketch Pad • Confirm triangle/angle measurements using GSP’s built-in measurement tools.
Materials	<ul style="list-style-type: none"> • Geometer’s Sketch Pad (v 4.06 or later) • Kontainer account information (Pro 50 package or better)
Procedures	<p>**NOTE: This lesson plan is to be used in conjunction with other lesson plans in a chapter/unit concerning the unit circle. It is not to be used by itself. **</p> <ol style="list-style-type: none"> 1. Demonstrate to students basic tools in GSP, such as drawing segments and measuring segment length. 2. Assign students the task of drawing a unit circle using only three points in GSP. Ask them to also measure lengths of segments representing 45-45-90 and 30-60-90 triangles. All of this should be done in one GSP file titled “Unit_Circle_[last name][first initial]. gsp” (Assignment for completion, 5 pts) 3. Students should turn in the file using Kontainer (Lease package PRO 50 or better recommended). Once their own file is uploaded, students may look at other students’ files to check their answers (be sure to enable read-only downloads).
Homework:	<ol style="list-style-type: none"> 1. GSP file as detailed above (For completion, 5 pts) 2. File uploaded to Kontainer & looked at other students’ files.