

# CIITS: Using Tools and Manipulatives Quick Reference Card

## CIITS: Using Tools and Manipulatives

**Audience:** This document is intended for users who know how to create a test in the Assessment Admin module.

Make rulers, compasses, protractors, and calculators—collectively referred to as tools and manipulatives—available to students taking a test online. When enabled on a test, images will not be scaled to a different size by the system; they will display at the same resolution at which they were inserted into the test. This ensures that measurements taken with manipulatives are accurate.

Test item creators are responsible for making sure that images are scaled correctly on printed tests for which students will use their own tools. In addition to the tools and manipulatives that you can add at the test level, you can also attach formula reference sheets to individual open response items as needed.

### Enabling a Test for Tools and Manipulatives

To enable a test for tools and manipulatives, when creating a test, be sure to select **Yes** for Enable Tools & Manipulatives on the Create page. Then select the particular features to make available.

### Toolbar

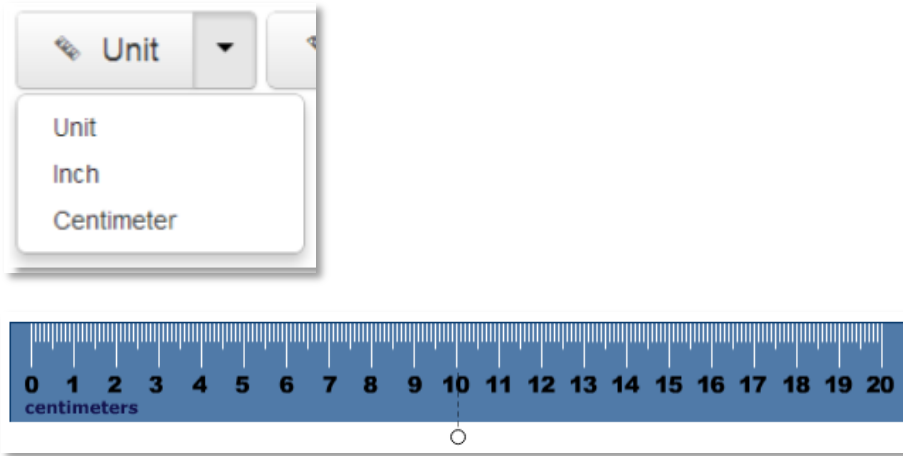
For online tests, the toolbar for all enabled features is on the top right corner of the test screen. Students click an icon to open a tool or manipulative. Click **Clear** to remove all drawing marks from the screen. For the iPad, an additional icon for highlighting text in passages is available.



### Ruler

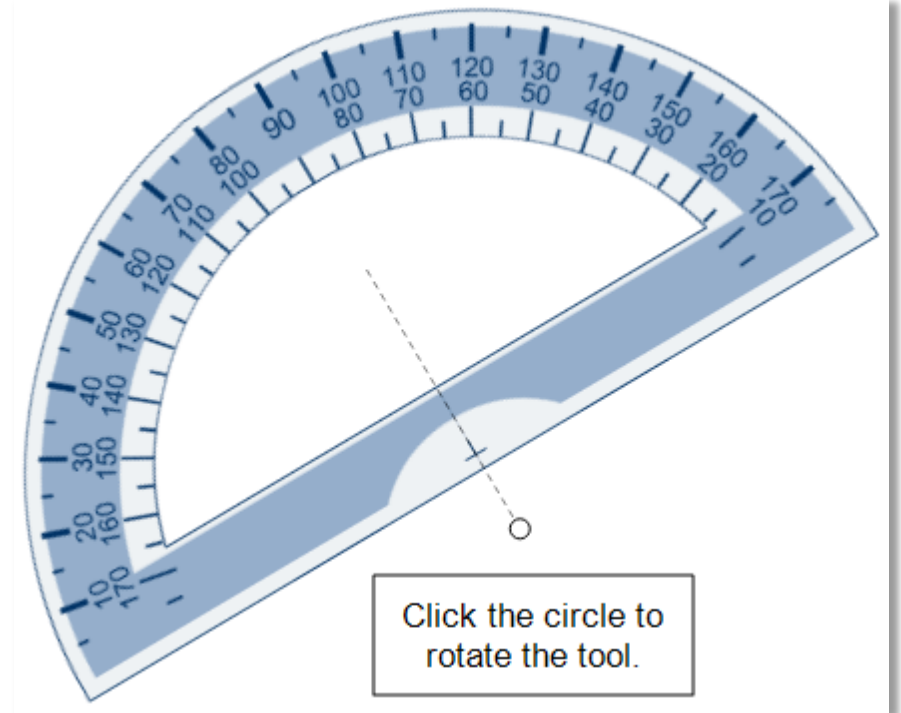
Select one of the three available rulers: an inch ruler, a centimeter ruler, and a unit ruler (a ruler without a specific unit of measurement). To move the ruler, click and drag it. To rotate it, click the small circle below the tool and move your cursor.

# CIITS: Using Tools and Manipulatives



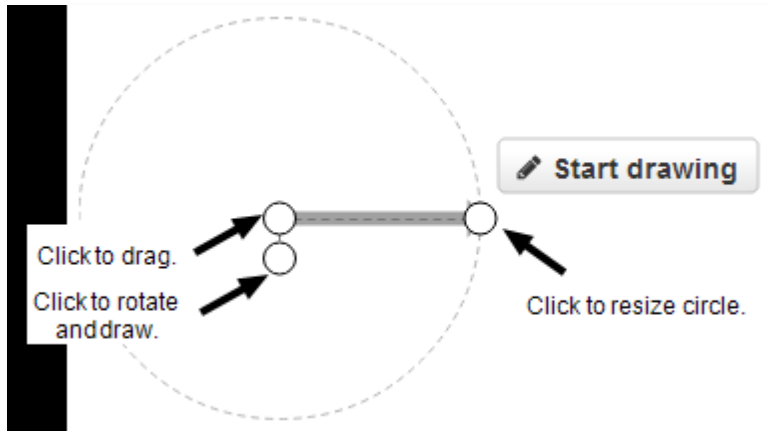
## Protractor

To move the protractor, click and drag it. To rotate it, click the small circle below the tool and move your cursor.



## Compass

For the compass, use the three circles to move, rotate, draw, and resize the compass. The compass is the only manipulative that students can use to make marks on their screens. Students can clear the marks by clicking the trash can icon on the manipulatives toolbar.



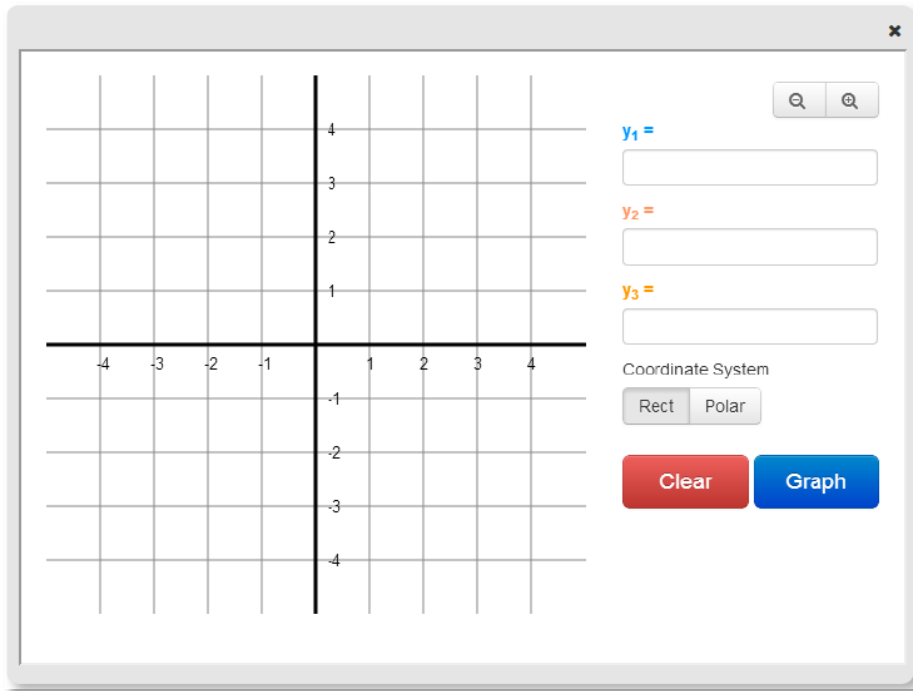
# CIITS: Using Tools and Manipulatives

## Calculators

There are three calculators: a basic four-function calculator, a scientific calculator, and a graphing calculator.

## Graphing Calculator

The graphing calculator can graph rectangular and polar coordinates. Click **Graph** to graph the entered coordinates, and **Clear** to reset the calculator.



## Scientific Calculator

The scientific calculator has functions not available on the basic four-function version, such as the sine (sin), cosine (cos), and tangent (tan) functions.



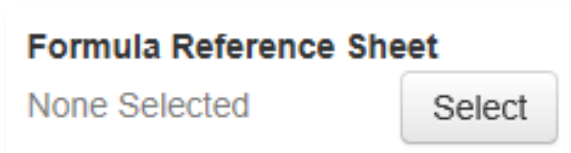
# CIITS: Using Tools and Manipulatives

## Formula Sheets

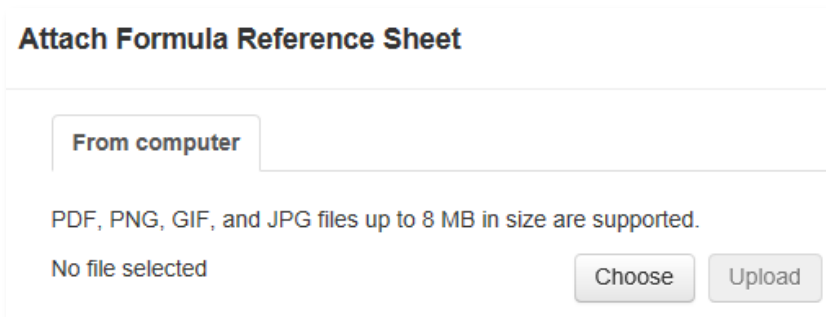
To make reference sheets—such as formulas, the periodic table, and units of measure—available to students on a test, attach a formula sheet when creating or editing an open response item. You do not need to set the Enable Tools & Manipulatives test property to Yes for formula sheets to appear on a test. The button for formula sheets in test items will always appear where they are attached. To use PDFs, a PDF reader plug-in is required for each test tunnel browser.

To attach a file to an in-progress open response item:

1. Click **Select** under Formula Reference Sheet



2. Click **Choose**



3. Select the file

Formula sheets can be PDF, PNG, GIF, or JPG files up to 8 MB in size.

4. Click **Upload**

5. Click **Attach**

