

## Quadrilateral Teacher Document

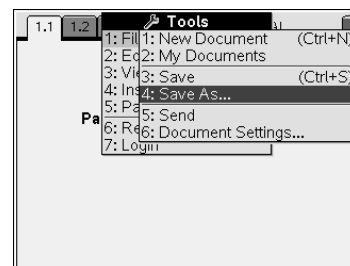
The activity was designed to be used as an exploratory activity by the students. Students can work in groups of two or three to give them the opportunity to confirm their findings with other students.

The students should be familiar with how to measure segments, to measure angles, and to find the slopes of lines. If this activity is the first one to make these measurements, the students could be instructed how to make these measurements using the parallelogram file. Each file contains multiple copies of each quadrilateral to give the students the opportunity to make mistakes and not feel as if they have “messed up”. Multiple pages allow the students to complete each exploration without having a lot of “clutter” on the page.

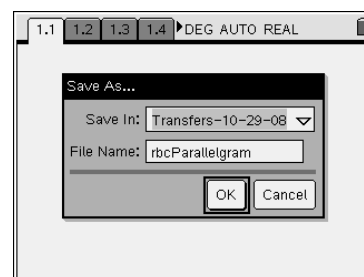
If you want the students to save each document for future reference you should have them re-save the document when they first open the document. Otherwise, students should not save the document when they move to the next file. In this way you will have a .tns file that has not been corrupted by the student exploration.

To resave the document after opening.

Press  $\#$ , 1: File, 1:New Document, 4: Save As

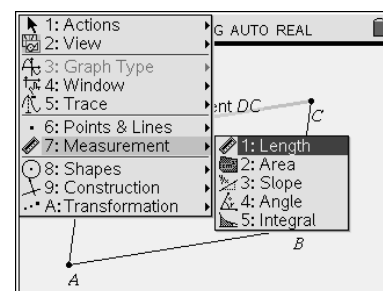


I would suggest a name with the student initials inserted in from on the file name. You may have your own system. Enter OK.

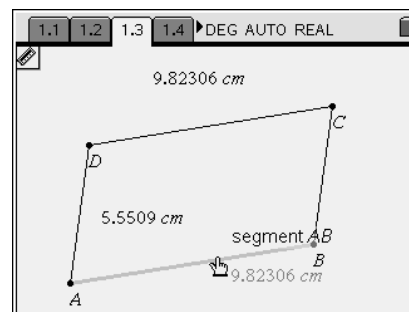


### To find the length of a segment—

Press  $\text{\textcircled{m}}$ , 7: Measurement, 1: Length, and Enter.

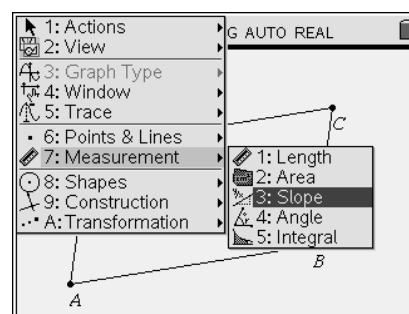


Point to a segment. The length should be visible. Press Enter, move the length to a convenient place on the screen, and press Enter again. Move to a new segment and repeat the process until all four sides are measured. Notice the length measurement tool in the upper left hand corner of the screen. After all four segments are measured, press (esc) to exit the measurement tool. A segment also can be measured by pointing to the endpoints of the segment.

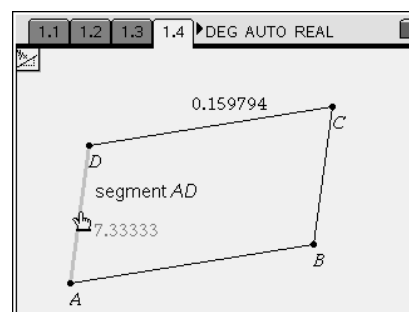


### To find the slope of a segment—

Press (menu), 7: Measurement, 3: Slope, and Enter.

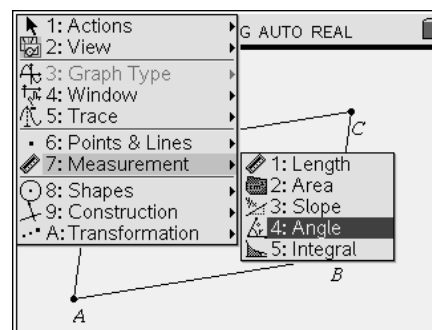


Point to a segment. The slope of the segment should be visible. Press Enter, move the slope measurement to a convenient place on the screen, and press Enter again. Move to a new segment and repeat the process until the slopes of all four sides are found. Notice the slope measurement tool in the upper left hand corner. Press (esc) to exit the measurement tool.

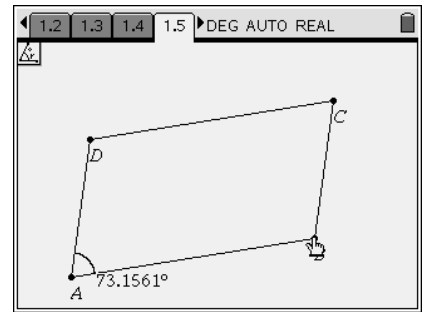


### To find the measurement of an angle—

Press (menu), 7: Measurement, 4: Angle, and Enter.



You will need to select each of the 3 points in the same order one would use to name the angle. Press enter as you select each point. The measurement of the angle should be visible. Press Enter. The angle measurement will be placed on the screen. Measure each of the other three angles. Notice the angle measurement tool in the upper left hand corner. Press  $\text{esc}$  to exit the measurement tool.



Once the students are comfortable using the measurement tools, they can explore the properties at their own rate.