Advanced Topics: Tools and Descriptions

Name of Tool	Description	Example of activities
Conic Sections Model	conic section model allows the student to clearly see the intersection of a plane with a cone. This model shows the three basic types of conic sections, the parabola, the hyperbola, and the ellipse.	https://www.onlinemathlearning.com/conic-parabolas.html This link gives you access to online video lesson with examples and solutions to help Algebra students learn about parabola conic sections.
Vernier Calipers	used to measure the distance between two opposing sides of an object. A caliper can be as simple as a compass with inward or outward-facing points. The tips of the caliper are adjusted to fit across the points to be measured, the caliper is then removed, and the distance read by measuring between the tips with a measuring tool, such as a ruler. The Vernier kind comprise a calibrated scale with a fixed jaw, and another jaw, with a pointer, that slides along the scale. The distance between the jaws is then read and can be accurate to a very high accuracy.	Printable list of exercises to help the performance of the teacher in class, e-learning and for practicing / self-assessment of the students. Exercises for practice of the reading and interpretation of instruments of linear measurement. https://www.stefanelli.eng.br/en/exercise-reading-vernier-caliper-millimeter/
Micrometer	A micrometer, sometimes known as a micrometer screw gauge, is a device incorporating a calibrated screw widely used for accurate measurement of components in mechanical engineering and machining as well as most mechanical trades, along with other metrological instruments such as dial, Vernier, and digital calipers	https://lessonworksheets.com/concept/micrometer-screw-gauge This link gives you access to worksheets on how to use the micrometer.
