

This activity is assessed through a form of formative assessment. This aligns with the learning objectives for the class activity to assess whether students (individually and collectively) are learning and provides an opportunity for the instructor to check students' understanding of prior knowledge of polar, cylindrical and spherical coordinates.

First students will write parametrizations for **Ellipsoid, Elliptic Paraboloid, Hyperbolic Paraboloid, and Cone** in Activity 1. Solution keys will be provided so that students can check their answers. It is highly important that students understand parametrization before visualizing the 3D-shapes in MATLAB. Students will be asked to correct their work based on the solution key and the activity sheets will be collected by the instructor. Students will receive full points for the Activity 1 for turning in their corrected work.

For the Activity- 2, 3 and 4, students will be graded based on the following rubric:

Categories of Action- Student can	Completed Task	Revisit Task	Feedback
Open a Live Script, add text in between lines of codes			
Run all the example codes			
Explain each command in the code using “%”			
Identify the proper code to sketch a surface			
Use appropriate variables and parametrization and/ or in-built functions			
Understand how the parameters are influencing the 3D plot			