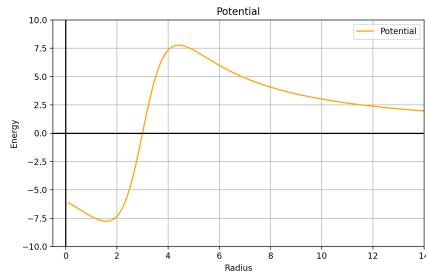


# 1 Effective Potential Diagrams, version 1

A mass is moving on a two dimension surface with a radially potential given by the graph below:



- (a) Sketch the effective potential if the angular momentum is **not** zero.
- (b) Describe qualitatively, the shapes of all possible types of orbits, indicating the energy for each in your diagram.