

1 Reduced Mass

(Simple graphing) Purpose: Discover some of the properties of reduced mass by exploring the graph.

Using your favorite graphing package, make a plot of the reduced mass

$$\mu = \frac{m_1 m_2}{m_1 + m_2} \quad (1)$$

as a function of m_1 and m_2 . What about the shape of this graph tells you something about the physical world that you would like to remember? You should be able to find at least three things. Hint: Think limiting cases.