

Figure 1: Free Body Diagram of a Simple Pendulum

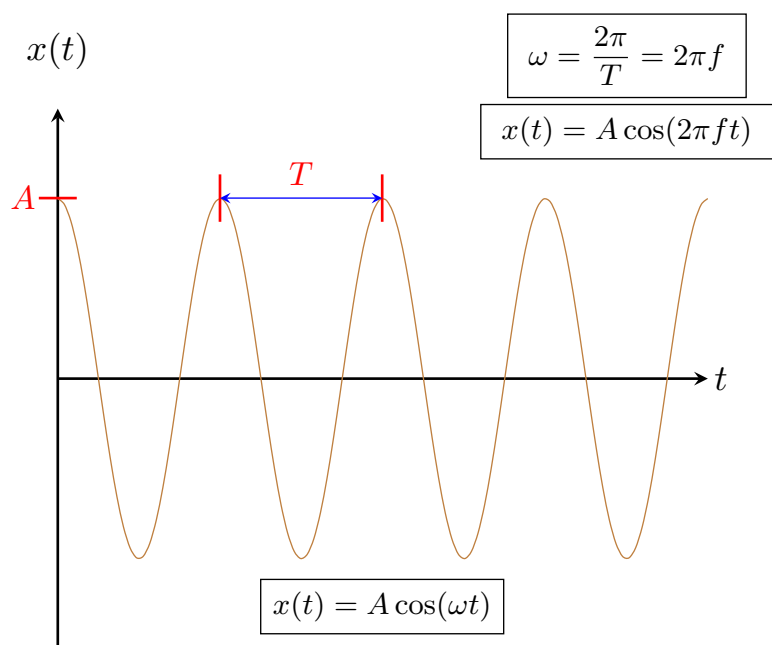


Figure 2: SMH Displacement Function

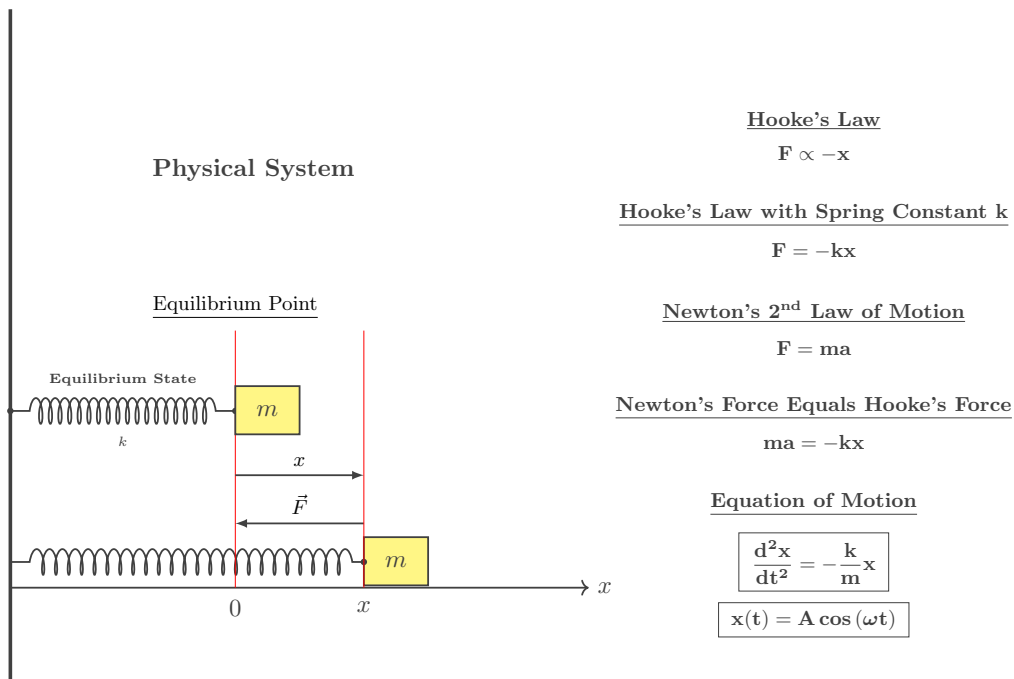


Figure 3: Spring and Mass System with Spring Constant k and Mass m

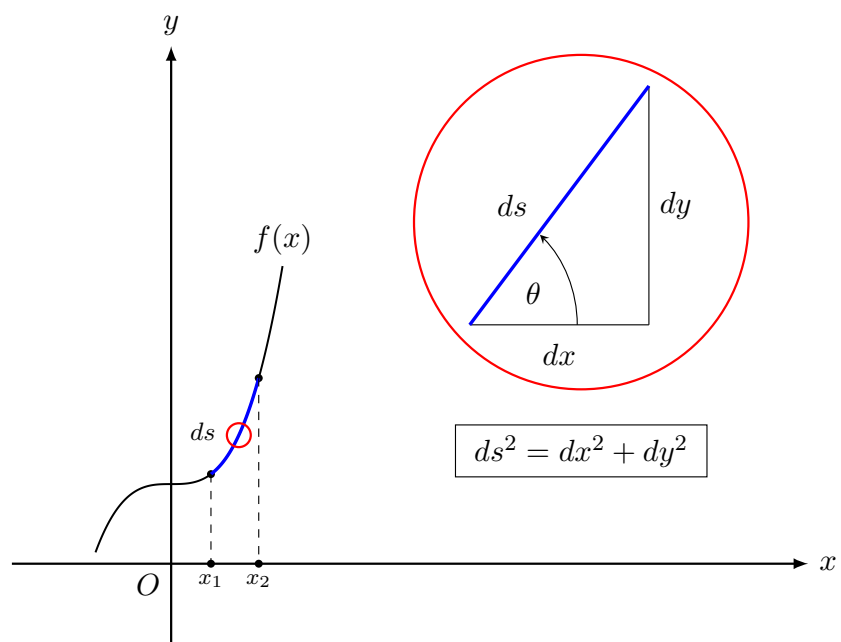


Figure 4: $f(x)$, ds and the Pythagorean Theorem

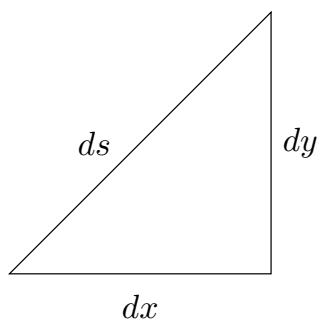


Figure 5: $ds^2 = dx^2 + dy^2$

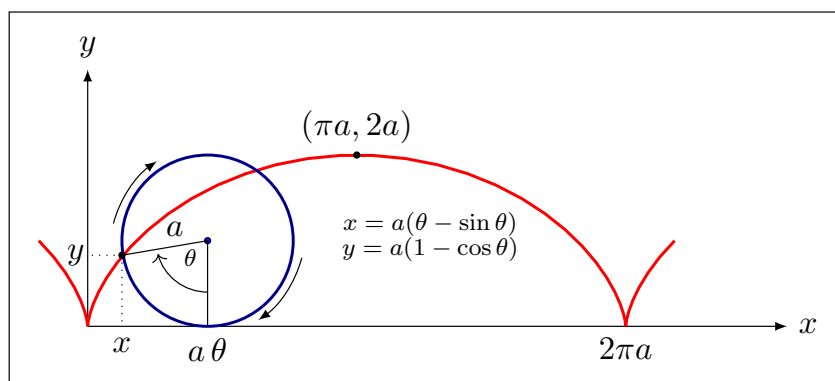


Figure 6: The Cycloid Curve

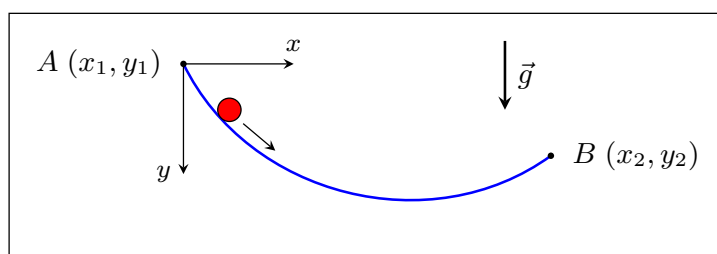


Figure 7: The Brachistochrone Problem Setup

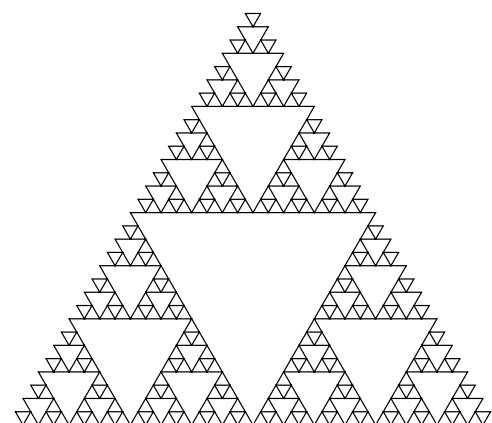


Figure 8: Sierpiński triangle/gasket

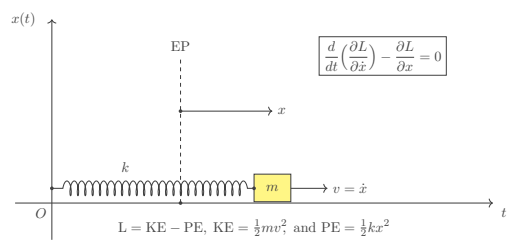


Figure 9: Simple Harmonic Motion Setup

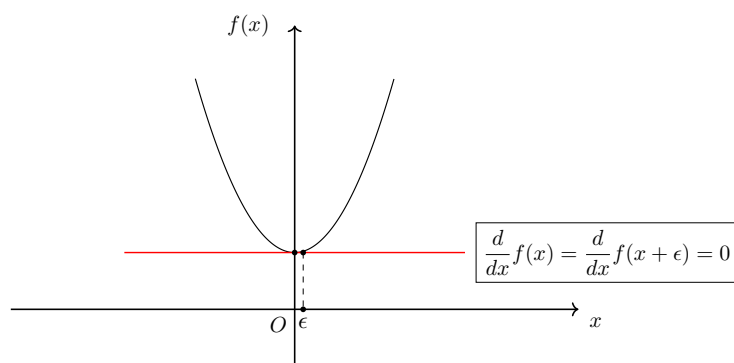


Figure 10: $f(x) = x^2 + 1$

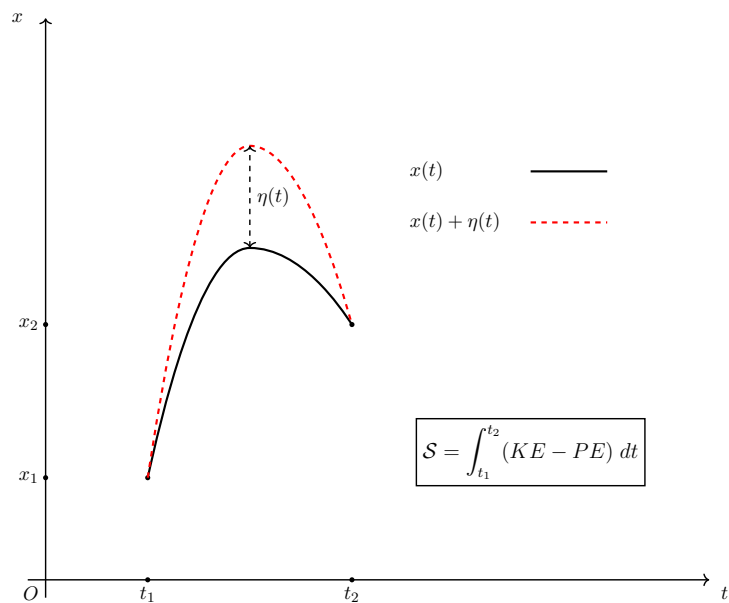


Figure 11: Principle of Least Action Setup

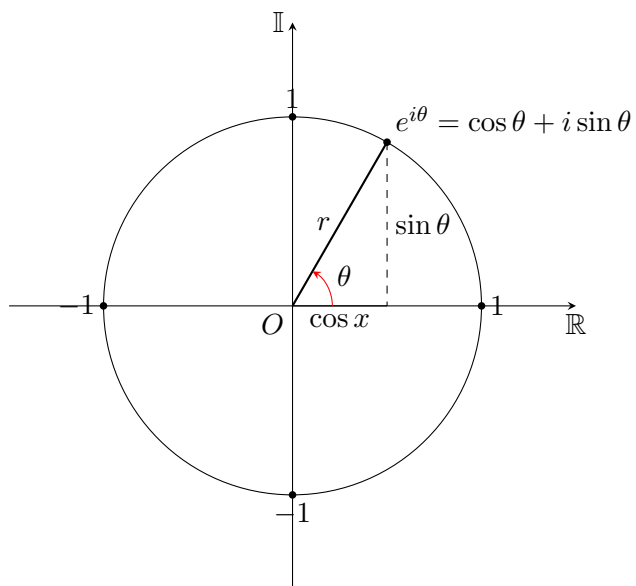


Figure 12: Euler's Formula in the Complex Plane

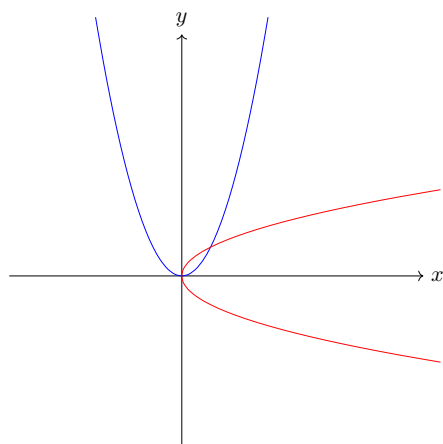


Figure 13: This is a graphing test

