PEP 151 Lab 2 Report
Distance Determination from Cepheid Variable Stars

Name:

I pledge my honor that I have abided by the Stevens Honor System.

I. Introduction

(In a few sentences describing the goal of this lab exercise)

II. Plots

(Insert the light curve and luminosity-period relation plots you made using either excel or other package. The plots need to have titles with units on the axes to clearly indicate what you're plotting.)

III. Results

From the light curve above, I have determined that the pulsation period of "delta Cephei" to be _____ hours, or _____ days.

From the light curve, I have also determined the average apparent magnitude of "delta Cephei" to be m = _____.

From the luminosity-period relation plot and use the pulsation period I have determined above, I estimate the absolute magnitude of "delta Cephei" to be M = _____.

Using the relation between apparent magnitude m and absolute magnitude M: $m-M=2.5 \log_{10}(d/10)^2$, I have calculated the distance d to be _____ parsecs.

Looking up resources online (cite your source), the established value for the distance to "delta Cephei" is _____ parsec.