

Math 1513 - College Algebra

Written Assignment 1 - Due 2014.08.24

Directions: Please answer the following question in complete sentences. Be sure to label all geometric objects in any illustrations. I will accept an answer in a scanned image format, as a pdf, or sent from your awesome picture phone.

Question: The time T required for a planet to make one revolution around the sun is modeled by the equation $T = 0.407R^{3/2}$ where R is the maximum radius of the planet's orbit (in millions of miles). Use the equation to approximate the number of days required for one complete orbit of the planets Venus, Earth, Mars and Jupiter. Compare your answers to the known values for each orbit.