**Determining the Mass of the Host Star of Kepler Planet 22b**

According to Newton’s formulation of Kepler’s 3rd Law:

P2 = a3/(m1+m2)

where the period (P) and the semi-major axis (a) are given in years and astronomical units, and mass is given in units of the solar mass.

The NASA Kepler mission has found a planet around the star Kepler 22. The planet orbits with a period of 290 days and a semi-major axis of 0.85 AU. What is the mass of the star Kepler 22?