## Problem P4:

A spacecraft is ready to embark on a trip from earth to Mars. Starting from an orbit about the sun that basically matches the earth's orbit (a circle with a radius of 1 AU) the spacecraft is boosted (in a short time) into an elliptical orbit whose aphelion is at the radius of Mars' orbit (about 1.5 AU). How many days does it take for the spacecraft to travel from earth to Mars along this orbit?