

# [ PROBLEM OF THE WEEK #8 ]

(#1 on page 643) - DISTANCE BETWEEN A SATELLITE & A TRACKING STATION.

> A SATELLITE TRAVELING IN A CIRCULAR ORBIT 1600 KILOMETERS ABOVE EARTH IS DUE TO PASS DIRECTLY OVER A TRACKING STATION AT NOON. ASSUME THAT THE SATELLITE TAKES 2 HOURS TO MAKE AN ORBIT AND THAT THE RADIUS OF EARTH IS 6400 KILOMETERS. FIND THE DISTANCE BETWEEN THE SATELLITE AND THE TRACKING STATION AT 12:03 P.M.

