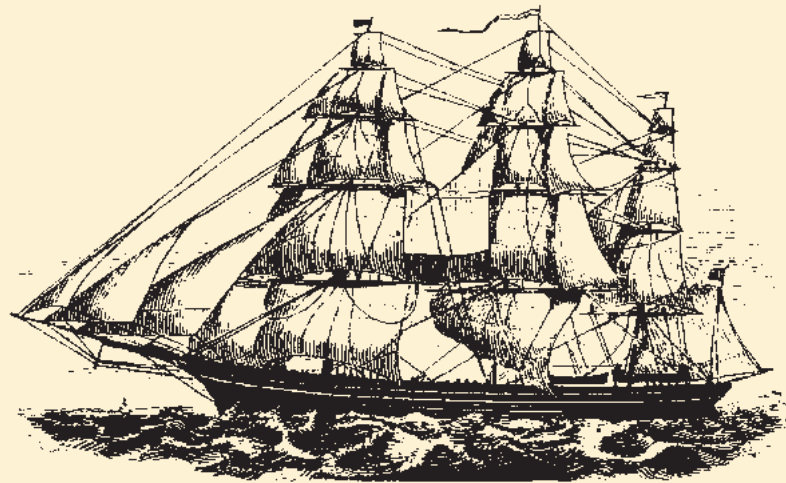




Problem **69**

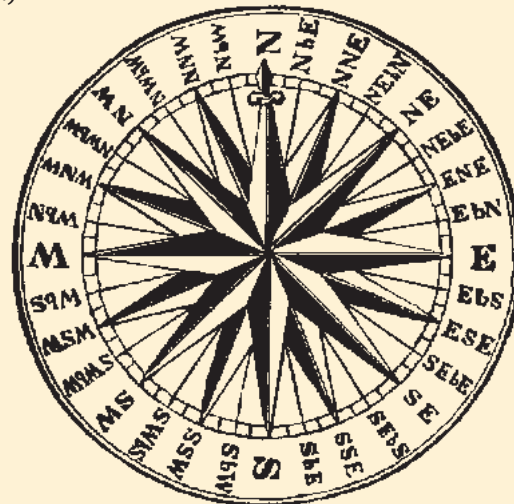
A nautical mile, by definition, is one minute of longitude at the equator. It is also defined as 1,852 meters by international agreement. What is the radius of a sphere using the information given?



Problem **70**

You have a deed that reads, “Beginning at latitude  $40^{\circ}00'00''$  North and longitude  $120^{\circ}00'00''$  West; thence North 10 miles; thence East 10 miles; thence South 10 miles; thence West 10 miles.”

How far from your point of beginning will you be after surveying this deed? (Use the radius calculated in Problem 69 and assume the earth is a sphere.)



The problems for this column are contributed by retired California surveyor Dave Lindell, LS.

Solutions can be found on our website at [www.profsurv.com](http://www.profsurv.com)