

## Problem of the Week #4

Assigned: 23 SEP 10, 1300

Due: 30 SEP 10, 1300

### Global Problem

On my travels I came to a place from which I could travel exactly 1 mile south, then travel exactly 1 mile east, then travel exactly 1 mile north to arrive back at my starting position. From what location(s) on earth is this possible?

Solution e-mailed by Dr. Rickey:

The usual answer to the polar bear problem is the North Pole.

I don't know when someone realized that there were infinitely many families of infinitely many solutions.

Consider circles around the South Pole of circumference 1,  $1/2$ ,  $1/3$ , . . . Now if you start one mile North of any of these circles, you get a solution.

There are no others.

Fred