? ? ? Problem Corner ? ? ?

edited by William J. Bruce and Roy Sinclair

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Problems suggested here are aimed at students of both the junior and senior high schools of Alberta. Solutions are solicited and a selection will be made for publication in the next issue of delta-k. Names of participants will be included. All solutions must be received (preferably in typewritten form) within 30 days of publication of the problem in delta-k.

Mail solutions to: Dr. Roy Sinclair or Dr. Bill Bruce Department of Mathematics University of Alberta Edmonton, Alberta T6G 2G1

Problem 8:

(Submitted by Roy Sinclair, University of Alberta)

A fly is located 1 m from the ceiling and in the middle of one end of a room. A hungry spider is located in the middle of the other end of the room and 1 m from the floor. Find the shortest path that the spider can take along the surface of the room to get to the fly if the room is 20 m long, 10 m high, and either (a) 10 m wide or (b) 15 m wide.

Hint: Unfold the room surface in each case to lie flat on a plane and solve both problems.