Week of August 22, 2016

A rectangular room measures 30 feet in length and 12 feet in height, and the ends are 12 feet in width. A fly, with a broken wing, rests at a point one foot down from the ceiling at the middle of one end. A smudge of food is located one foot up from the floor at the middle of the other end. The fly has just enough energy to walk 40 feet. Show that there is a path along which the fly can walk that will enable it to get to the food. (From The Heart of Mathematics: An Invitation to Effective Thinking, by Edward

Burger and Michael Starbird, Wiley Publishing, 2012.)