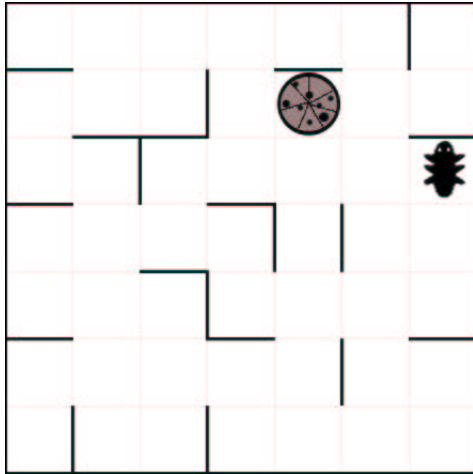


## Bud's Baby Cockroach



Deep in the physics sub-basement, cockroaches continue to multiply and spread - and Robin Gold's thesis office is packed with the filthy creatures.

One night (well, last night probably) after Bud leaves to the Lutz, the alpha cockroach - leader of the pack - crawls out of the drain and looks to feed. Somewhere in the room there is a pizza, and the fetid little monster must navigate around the obstacles before feasting upon it. (Yes, the diagram is to scale - it's a beautiful figure, so shut up).

The roach, however, is limited in its navigational abilities and walks only in straight lines. It will not turn before running into a wall and then only turns 90 degrees to the left or right before proceeding.

**Help the roach find Bud's pizza before she gets back and smashes its guts out.**

*Even Freud could do this maze.*



### Proofreader

Something looks very wrong. It may be hard to see at first, but this paragraph seems awkward. It reads a little differently than other paragraphs. So we decided to make it into a puzzle. Your task becomes figuring out the quirk in this paragraph. And we're not talking about something miniscule here. This composition misses something that almost every other paragraph has. The only clues you'll get: hidden in these sentences. Have you found it yet? Trust us, it exists, and you'll kick yourself when you hear the answer. If you think you know it, email us!

*Even Pythagoras could do this.*

### Walking the Line

Some number of ants are placed on the (100 cm) long edge of a meter stick. In a fashion not unlike Bud's cockroach (now on a line instead of a plane), they walk without turning until they either run into another ant or fall right off the end of the stick. If two ants meet, they both immediately turn around and proceed in opposite directions. If all ants walk at the same speed and could be initially distributed along the meter stick in any number of ways, what is the longest distance any ant will ever walk before falling off one end of the stick?

*Even Aristotle could do this.*

### So what if Freud can do it??

- Even Freud could do this.* Easy
- Even Pythagoras could do this.* Not easy
- Even Aristotle could do this.* More challenging
- Even Kant could do this.* This is a hard problem.
- Even Ray Mayer could do this.* Go ask him for help.

Think you know the answer?  
For more info on these puzzles, go to  
<http://www.reed.edu/~mcphailb/quest/>

Don't worry:  
*"You don't need  
to be smart to be  
president"*



Questions? Blitz: [puzzles@reed.edu](mailto:puzzles@reed.edu)