(Terence Tao's airport-inspired puzzle.) You want to get from one end of an airport to the other and your shoelace is undone. If you want to get to your destination as quickly as you can, is it better to tie your shoelace when you are on a moving walkway or when you are on stationary ground?

From http://gowers.wordpress.com/2012/07/07/a-trip-to-watford-grammar-school-for-boys/

Here is a passage from Vol. 8 of Proust's *Remebrance of things past.*

"But if the course of life, by making Cottard assume, if not at the Verdurins', where he had, because of the influence that past associations exert over us when we find ourselves in familiar surroundings, remained more or less the same, at least in his practice, in his hospital ward, at the Academy of Medicine, a shell of coldness, disdain, gravity, that became more accentuated while he rewarded his appreciative students with puns, had made a clean cut between the old Cottard and the new, the same defects had on the contrary become exaggerated in Saniette, the more he sought to correct them."

How would you go about checking that it was syntactically correct, and, even better, actually understanding it?

From http://gowers.wordpress.com/2012/06/08/how-should-mathematics-be-taught-to-non-mathematicians/

How many molecules from Socrates's last breath are in the room

(If you don't like this problem, you could try: How much does a cloud weigh?)

From http://gowers.wordpress.com/2012/06/08/how-should-mathematics-be-taught-to-non-mathematicians/

The batting averages paradox: how can it be that A has a better average than B in the first half of the season and a better average in the second half of the season, but B has a better average for the entire season?

In a greengrocer with just one till, it often happens that one customer has a big basket with many items that will take a long time to process, while just behind them is someone who wants to buy one small thing and has the exact change ready. Try to devise a system that would allow the occasional queue jump in a situation like this but that wouldn't have obvious defects (such as a person with a lot of shopping being overtaken by a very large number of people with only a small amount).

You are in the process of buying a washing machine for $250 at Sears, and are offered a five-year guarantee for $60. The sales attendant tells you that typical repairs cost at least $100. Should you go for the insurance?

From http://gowers.wordpress.com/2012/06/08/how-should-mathematics-be-taught-to-non-mathematicians/

A doctor tests a patient for a serious disease that one in ten thousand people have. The test is fairly reliable: if you have the disease, it gives a positive result, whereas if you don't, then it gives a negative result in 99% of cases. So the only problem with it is that it occasionally gives a false positive. The patient tests positive. How worrying is this?

From http://gowers.wordpress.com/2012/06/08/how-should-mathematics-be-taught-to-non-mathematicians/

Devise a strategy for never losing at tic – tac – toe. Try to make it as economical as possible, while still telling you unambiguously what to do for each move. What more could you ask of a strategy?