

Some Socially-Relevant Mathematics

Mentor Connect, January 18, 2018

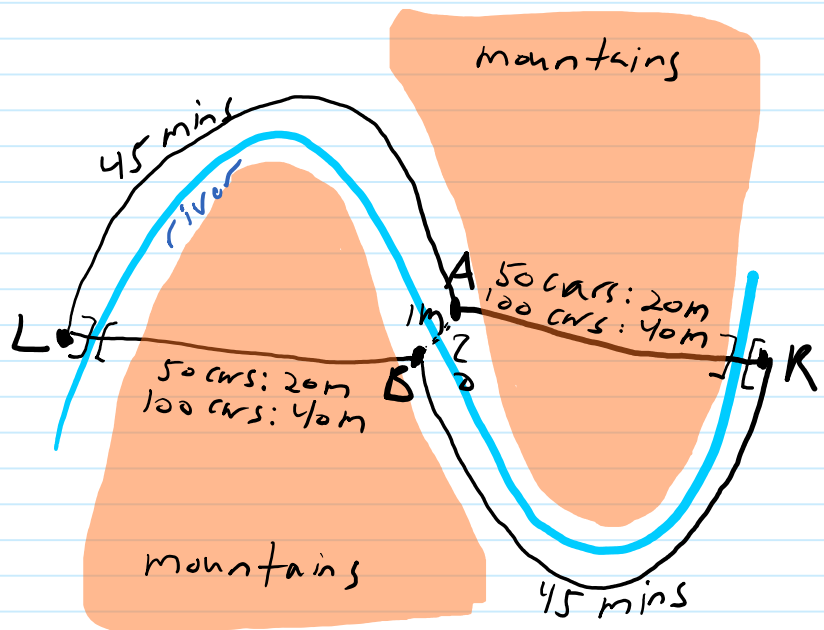
January 17, 2018 3:33 PM

1. The most valued piece of mathematics, ever.

Prisoner A \ Prisoner B	Prisoner B stays silent (cooperates)	Prisoner B betrays (defects)
Prisoner A stays silent (cooperates)	Each serves 1 year	Prisoner A: 3 years Prisoner B: goes free
Prisoner A betrays (defects)	Prisoner A: goes free Prisoner B: 3 years	Each serves 2 years

From <https://en.wikipedia.org/wiki/Prisoner's_dilemma>

2. Building roads reduces congestion?
Braess' Paradox: 100 cars per hour need to get from L to R. Does it make sense to build a 1-minute link from A to B?



3. Maya Bar-Hillel's version of Simpson's paradox. True fact: In Israel, in every 10-year age bracket death rates for Arabs are higher than for Jews, yet overall death rates for Jews are higher than for Arabs.

Duh??