



Quarterly Problem: Love is all around!



New year, new luck! Why not start it by implementing some of those new years resolutions? How about a romantic profession of love to your sweetheart, for example?

Is there anything more romantic than professions of eternal love to your partner? If you look closely, they can be found in almost every city: countless bridge railings are hung with so-called „Love locks“. Some of these locks are engraved, some colorfully painted with the lover’s names, again other’s origins remain secret . But there is one thing they all have in common: They symbolize the attachment and devotion of the people who put them there.

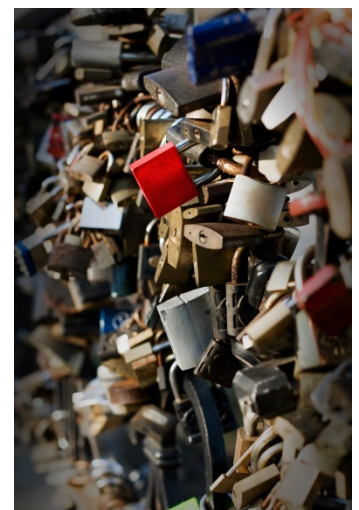
But what happens, when there are too many love locks on a bridge? Or when the bridge has to be renovated? Last year quite a few locks had to be removed from the railway bridge in Cologne due to the fact that they were partially blocking the bikeway. In some cities the locks had to be removed just as a result of the sheer weight they add to the bridge.

But exactly how much additional weight does a bridge actually have to carry if it’s hung with love locks? And how long would it take to remove all of the locks?

Begin by considering how many love locks could approximately be hanging on a well-known bridge (like the railway bridge in Cologne).

Brainstorm-Box

Inform yourself about how much money you could get by giving away the iron from the padlocks. What charity do you think a city should donate the money to?



Whose method is the most accurate?

Focus on phrasing your approach in a clear and comprehensible way. Also state what foundation you have used for your estimations.