



Problem of the Week

Problem D

The Perfect Mix

The proprietor of a lemon drink stand is trying to create the perfect summer lemon drink by combining two drinks that have already been prepared. The first lemon drink consists of a mixture of water and pure lemon juice in the ratio $2 : 1$, by volume. The second lemon drink, with twice the volume of the first lemon drink, is filled with a mixture of water and pure lemon juice in the ratio $3 : 1$, by volume. The contents of the two drinks are combined together into a third drink. This combination produces the perfect mix.

Determine the ratio of water to pure lemon juice, by volume, in the perfect mix.

