



Problem of the Week

Problem E

A Pinch of Salt?

A container initially contained 320 grams of common salt.

Mixture Y was formed by taking x grams of the common salt out of the container, adding x grams of Himalayan Pink Salt to the container, and then mixing uniformly. In Mixture Y, the ratio of the mass of the common salt to the mass of the Himalayan Pink Salt, expressed in lowest terms, was $c : h$.

Mixture Z was then formed by taking x grams of Mixture Y out of the container, adding x grams of Himalayan Pink Salt to the container, and then mixing uniformly. In Mixture Z, the ratio of the mass of the common salt to the mass of the Himalayan Pink Salt was $49 : 15$.

What is the value of $x + c + h$?

