

Answer on Question #53309 – Math – Algebra

Question

A bubble mixture requires $\frac{1}{4}$ tablespoon of soap with 1 cup of water. Which equation relates s , the number of tablespoons of soap, with w , the number of cups of water?

Solution

The ratio of the number of tablespoons of soap (s) to the number of cups of water (w) in described mixture:

$$\frac{s}{w} = \frac{1/4}{1},$$

which is the same as

$$\frac{s}{w} = \frac{1}{4}$$

Hence

$$s = \frac{1}{4}w$$

or

$$w = 4s$$

Last two equations clearly relates s and w

Answer: $s = \frac{1}{4}w$ or $w = 4s$