

7.RP Sore Throats, Variation 1

Task

Nia and Trey both had a sore throat so their mom told them to gargle with warm salt water.

Nia mixed 1 teaspoon salt with 3 cups water.

Trey mixed $\frac{1}{2}$ teaspoon salt with $1\frac{1}{2}$ cups of water.

Nia tasted Trey's salt water. She said,

"I added more salt so I expected that mine would be more salty, but they taste the same."

- a. Explain why the salt water mixtures taste the same.
- b. Which of the following equations relates s , the number of teaspoons of salt, with w , the number of cups of water, for both of these mixtures? Choose all that apply.

i. $s = \frac{1}{3}w$

ii. $s = 3w$

iii. $s = 1\frac{1}{2}w$

iv. $w = 3s$

v. $w = \frac{1}{3}s$

vi. $w = \frac{1}{2}s$



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