Name: .... Class: ....

Multiply unit fractions by whole numbers: Words problems

a. Last Monday, John harvested $\frac{1}{4}$ kg of grapes from his garden. This Monday, he harvested 3 times as many grapes as last Monday. How many grams of grapes did he harvest this Monday?
Simplify your answer.

b. This morning, Cynthia made breakfast for herself. She fried some doughnuts and made tea. She put $\frac{1}{3}$ of the sugar she had in the house in her cup of tea and sprinkle twive as much sugar on her doughnuts as in her tea. How much sugar did she sprinkle on her doughnuts?

c. Mrs. Williams is making homemade lollipops for her kids. She puts $\frac{1}{4}$ cup light corn syrup into each batch of lollipops. How many cups of light corn syrup will she use for 13 batches of lollipops? Simplify your answer.

mathskills4kids

Name: .... Class: ....

Multiply unit fractions by whole numbers: Words problems

a. Last Monday, John harvested $\frac{1}{4}$ kg of grapes from his garden. This Monday, he harvested 3 times as many grapes as last Monday. How many grams of grapes did he harvest this Monday?
Simplify your answer.

Let's write down the given information.
Quantity of grapes John harvested last Monday = $\frac{1}{2}$ kg
Quantity of grapes he harvested this Monday = 3 times as many grapes as last Monday
= $\left(3 \times \frac{1}{4}\right)$ kg = $\left(\frac{3}{1} \times \frac{1}{4}\right)$ kg = $\frac{3}{4}$ kg
But we know that,
1 kg = 1000g
So, $\frac{3}{4}$ kg = $\left(1000\,g \times \frac{3}{4}\right)g = \left(\frac{1000 \times 3}{4}\right)g = \left(\frac{3000}{4}\right)g = \left(\frac{750 \times 4}{1 \times 4}\right)g = 750\,g.$

b. This morning, Cynthia made breakfast for herself. She fried some doughnuts and made tea. She put $\frac{1}{3}$ of the sugar she had in the house in her cup of tea and sprinkle twive as much sugar on her doughnuts as in her tea. How much sugar did she sprinkle on her doughnuts?

Let's write down the given information.
Amount of sugar she put in her tea = $\frac{1}{3}$
Amount of sugar she sprinkle on her doughnuts = twice as much sugar on her doughnuts as in her tea
= $2 \times \frac{1}{4}$ = $\frac{3}{1} \times \frac{1}{4}$ = $\frac{3}{4}$

c. Mrs. Williams is making homemade lollipops for her kids. She puts $\frac{1}{4}$ cup light corn syrup into each batch of lollipops. How many cups of light corn syrup will she use for 13 batches of lollipops? Simplify your answer.

Let's first of all write down the given information.
Amount of corn syrup she puts in each batch = $\frac{1}{2}$ cup.
So, amount of corn syrup she will put in 13 batches = $\left(\frac{1}{2} \times 13\right)$ cups
= $\frac{3}{1} \times \frac{1}{4}$ = $\frac{3}{4}$ = $6\frac{1}{2}$ cups