

MY Homework

Lesson 8

Problem Solving: Use Logical Reasoning

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Hailey made raisin bread. She used flour, raisins, and water. The amounts of these ingredients were $\frac{1}{3}$ cup, $\frac{1}{4}$ cup, and $\frac{2}{3}$ cup. She used more flour than water. She used more water than raisins. How much of each ingredient did Hailey use?

Understand

What facts do you know?

Hailey used flour, raisins, and water to make bread. The amounts of the ingredients were $\frac{1}{3}$ cup, $\frac{1}{4}$ cup, and $\frac{2}{3}$ cup.

What do you need to find?

I need to find how much of each ingredient Hailey used.

Plan

I will use logical reasoning to solve the problem.

3 Solve

The order of the ingredients from greatest to least amounts is flour, water, and raisins. The order of the amounts from greatest to least is $\frac{2}{3}$ cup, $\frac{1}{3}$ cup, and $\frac{1}{4}$ cup. So, Hailey used $\frac{2}{3}$ cup of flour, $\frac{1}{3}$ cup of water, and $\frac{1}{4}$ cup of raisins.

Check

Does the answer make sense?

Yes. The clues match the answer.



Solve each problem by using logical reasoning.

- Mathematical ... Stop and Reflect Ryan has his artwork displayed at the library, the mall, and the bank. Use the clues to find the fraction of his art that is displayed at each place.
 - $\frac{1}{4}$ of the art is at one location, $\frac{1}{8}$ of the art is at the second location, and $\frac{5}{8}$ of the art is at the third location.
 - There is more of Ryan's art at the library than the mall.
 - There is less of Ryan's art at the bank than at the mall.

- 2. Benjamin made a fruit salad with strawberries, blueberries, and kiwi. Use the clues to find the amounts of each ingredient.
 - The amounts were $\frac{3}{4}$ cup, $\frac{2}{8}$ cup, and $\frac{1}{2}$ cup.
 - Benjamin used more blueberries than strawberries.
 - · Benjamin used more strawberries than kiwi.

3. Layla wrote a report about insects. She listed the lengths of tiger beetles, carpenter ants, and aphids. The lengths were $\frac{1}{2}$ inch, $\frac{5}{8}$ inch, and $\frac{1}{8}$ inch. A tiger beetle is bigger than a carpenter ant. A carpenter ant is bigger than an aphid. List the sizes of each insect.

