Interpret and Compute Quotients of Fractions - Step-by-Step Lesson

Lesson 1 Fraction Problem:

1. How many 3/4-cup servings are in 3/2 cups of coffee?



Explanation:

Step 1) First we look to see what is being asked of us.

"How many 3/4-cup servings are in 3/2 cups of coffee?"

Step 2) Divide the total amount of coffee by the number of cups

$$\frac{3}{2} \div \frac{3}{4}$$

Now turn this from a division problem into a multiplication problem by multiplying by the reciprocal.

$$\frac{3}{2} \div \frac{3}{4} = \frac{3}{2} \times \frac{4}{3}$$

Now we will multiply:

$$\frac{3}{2} \times \frac{4}{3} = \frac{3 \times 4}{2 \times 3} = \frac{12}{6} = 2$$

Answer is: 2