

# PUZZLE IT OUT!

## WRITING A MATH ARGUMENT

To solve the problem of how many ounces of chocolate chips Carlita needs for her larger batch of the Turkey Surprise recipe, I first need to determine the quantities of ingredients in the original recipe.

Looking at the original recipe, I see that the ingredients are proportional to each other. The quantities are ultimately determined by the amount of turkey.

The turkey amount is given in pounds, but I need to find the increased amount of chocolate chips in ounces. So I'll start by converting the turkey's units from pounds to ounces.

First, I'll convert the  $2\frac{1}{2}$  pounds of turkey to its decimal equivalent of 2.5 to make multiplying easier. Then, since 1 pound = 16 oz, I'll set up this equation:  $2.5 \text{ lbs of turkey} \times 16 \text{ oz per pound} = 40 \text{ oz of turkey}$ .

The amount of the next ingredient, cherries, is listed as  $\frac{1}{4}$  (which I can convert to 0.25) of the amount of the turkey. So I'll set up this equation:  $40 \text{ oz of turkey} \times 0.25 = 10 \text{ oz of cherries}$ .

Since the amount of chocolate chips is 0.35 of the 10 oz of cherries, I'll set up this equation:  $0.35 \times 10 \text{ oz of cherries} = 3.5 \text{ oz of chocolate chips}$  in the original recipe. I feel confident I chose the right operation and put the decimal point in the correct place because I checked it with mental math. I know 0.35 is equivalent to about  $\frac{1}{3}$ , and if I were to divide 10 oz into three equal parts, the parts would be about 3 oz each. So 3.5 oz of chocolate chips sounds right. And 35 oz would definitely be too much—it's more than the amount of cherries!

**Therefore, Carlita will need 7.875 oz of chocolate chips for the bigger batch of her recipe.**

