Division of Unit Fractions and Whole Numbers - Step-by-Step Lesson

Lesson 1 Division Problem:

Jack wants to give a treat to his two friends. Jack buys a small chocolate pastry that weighed 1/4 of a pound. He divides the pastry into 2 equal parts. What is the weight of each friend's pastry?



Explanation:

Divide the total amount of pastry by the number of pieces.

$$\frac{1}{4} \div 2 = ?$$

We will write 2 as an improper fraction.

$$2 = \frac{2}{1}$$

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

$$\frac{1}{2} \div \frac{2}{1} = \frac{1}{4} \times \frac{1}{2}$$

Now we will multiply:

$$\frac{1}{4} \times \frac{1}{2} = \frac{1 \times 1}{4 \times 2} = \frac{1}{8}$$

Each part of pastry weighs 1/8 of a pound.