

STUDENT MATERIALS

PART 1: REALLY RATIONAL PROBLEMS

1. Nesara needs to make 6 batches of peanut butter cookies for her school's bake sale to raise money for field trips. The recipe she has for one batch of cookies requires $1\frac{1}{2}$ cups of all-purpose flour. How many cups of flour will she need to make all 6 batches?

$$1\frac{1}{2} \text{ cup of Flour} = 1 \text{ Batch of cookies}$$

$$1\frac{1}{2} \times 6 = 9$$

9 cup of Flour

2. Nesara paid \$3.99 for the bag of flour. The bag has 18 cups of flour. To the nearest cent, how much is she paying for the flour that she used in her 6 batches of cookies?

$$3.99 \text{ cost} = 18 \text{ cups}$$

$$18 \div 2 = 9$$

$$3.99 \div 2 = 1.995$$

$$9 \text{ cup} = 1.99$$

6 Batches of cookies cost
1.99

3. Maya is helping Nesara make the cookies and volunteered to bring the brown sugar. The recipe calls for $\frac{1}{2}$ cup per batch. The bag of brown sugar has 4 cups and costs \$2.49. To the nearest cent, how much did she pay for the brown sugar they used for the 6 batches of cookies?

3 cups

$$\frac{3}{4} \text{ out}$$

$\frac{1}{2}$ Per batch

Bag contains 4 cups
and cost 2.49

$$\frac{3}{4} = 0.75$$

$$3 \text{ batches} \div 0.5 \text{ cup per Batch} = 6 \text{ Batches}$$

$$\$2.49 \div 0.75 = 1.8675$$

PART 2: BEYOND REALLY RATIONAL PROBLEMS

4. Alia wants to make another 6 batches using the same recipe that Nesara used. Nesara tells Alia that they had \$10 to spend in total. She already paid \$3.99 for the bag of flour and Maya paid \$2.49 for the brown sugar. Alia needs to purchase flour and brown sugar but has the rest of the ingredients already at home. Since they have already spent part of the \$10, which items do you think she should purchase with the remaining money she has left over? Justify your thinking.

Peanut Butter (recipe uses 1 cup per batch)	\$2.29 per jar (≈ 3.25 cups)
Baking Powder (recipe uses 0.75 tsp per batch)	\$2.69 per can (≈ 47 tsps.)
Vanilla Extract (recipe uses 1 tsp per batch)	\$1.99 per bottle (≈ 12 tsps.)

Alia can buy Baking powder and have \$0.83 left over
Alia could buy Vanilla extract and have \$1.53 left over