

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?

$$\begin{array}{r} 3 \\ 1.5 \\ \times 6 \\ \hline 9.0 \end{array}$$

$$1\frac{1}{2} = 1.5$$

9 cups of all-purpose flour for 6 batches.

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?

↓
9 cups of flour

\$2.00 for 9 cups of flour (6 batches of cookies)

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?

$$\begin{array}{r} 3 \\ 0.5 \\ \times 6 \\ \hline 3.0 \end{array}$$

$$\frac{1}{2} = 0.5$$

3.0 cups for 6 batches of cookies

4 cups = \$2.50
nearest cent

\$1.86 for 3 cups of brown sugar

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.)

I think Alia should buy peanut butter. Since the recipe is for peanut butter cookie, she should buy peanut butter other than other ingredients with her remaining money. Peanut butter is most used in the recipe. So, Alia will need peanut butter the most out of all the ingredients she could buy with her remaining money.

Alia's remaining money \$3.52
after purchasing flour
and brown sugar

$$\begin{array}{r}
 10 - 3.99 = 6.01 \\
 6.01 - 2.49 = 3.52 \\
 \underline{- 2.29} \text{ peanut butter} \\
 1.23 \text{ money after buying peanut butter}
 \end{array}$$