

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?

$$\frac{1}{2} \times 6 = 3$$

$$6 \times 1 = 6$$

$$3 + 6 = 9 \text{ cups}$$

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?

$$.22 \times 6 =$$

$$\$1.32$$

$$18 \overline{) 3.99}$$

$$\begin{array}{r} 0.22 \\ 18 \overline{) 3.99} \\ \underline{36} \\ 39 \\ \underline{36} \\ 39 \\ \underline{36} \\ 39 \\ \underline{36} \\ 39 \end{array}$$

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?

$$\frac{1}{2} \times 6 = 3 \text{ cups}$$

$$0.62 \times 3 = \$1.86$$

$$4 \overline{) 2.49}$$

$$\begin{array}{r} 0.62 \\ 4 \overline{) 2.49} \\ \underline{24} \\ 9 \\ \underline{8} \\ 19 \\ \underline{16} \\ 39 \\ \underline{36} \\ 39 \end{array}$$

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

Peanut Butter:	$\frac{3.25}{2.29}$ \$0.70 per cup \$4.2
Baking Powder:	$\frac{47}{2.69}$ \$0.05 per tsp \$0.60
Vanilla Extract:	$\frac{12}{1.99}$ \$0.16 per tsp \$0.96

She should buy the Baking Powder and vanilla Extract.

$$\begin{array}{r}
 0.60 \\
 + 0.96 \\
 \hline
 \$1.56
 \end{array}$$

$$\begin{array}{r}
 3.52 \\
 - 1.56 \\
 \hline
 \$1.94 \text{ left}
 \end{array}$$