

Name _____

Project

CRITICAL AREA

Completing understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers

Sweet Success

1

Plan

- You are asked to determine how many pounds of each ingredient are needed to make one batch of Apple Cherry Mix.
- You must also decide on a price for each bag of Apple Cherry Mix.
- Use the Important Facts to help you plan.

2

Put It Together

- Read the ingredients in one bag of Apple Cherry Mix. Choose an appropriate operation to find the number of pounds of each ingredient that are needed to make 250 bags.
- Use one or more operations to find the total cost of making one bag of Apple Cherry Mix.
- Talk to a partner to decide how much the company should charge for one bag of Apple Cherry Mix.

To find the number of pounds of each ingredient needed to make one batch (250 bags) of Apple Cherry Mix, I should:

Multiply the number of pounds of each ingredient in one bag by 250.

To decide on a price for each bag, I need to:

Find the total cost of the ingredients in one bag. Then I need to choose a price greater than this so there will be a profit.

I would use these ingredients to make one batch of Apple Cherry Mix:

$187\frac{1}{2}$ pounds of dried apples; 125 pounds of dried cherries; $62\frac{1}{2}$ pounds of walnuts

The total cost of the ingredients in each bag of Apple Cherry Mix is:

**dried apples: \$2.10; dried cherries: \$2.24;
walnuts: \$0.99; total: \$5.33**

I think the company should charge this amount for each bag of Apple Cherry Mix:

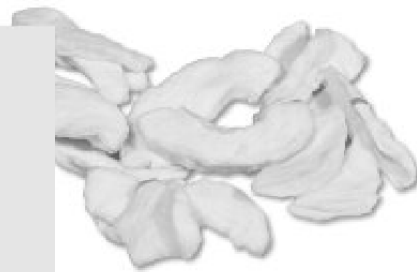
Possible answer: \$5.99



3

Reflect

- What price did you choose for each bag of Apple Cherry Mix?
- How did you decide on this price?

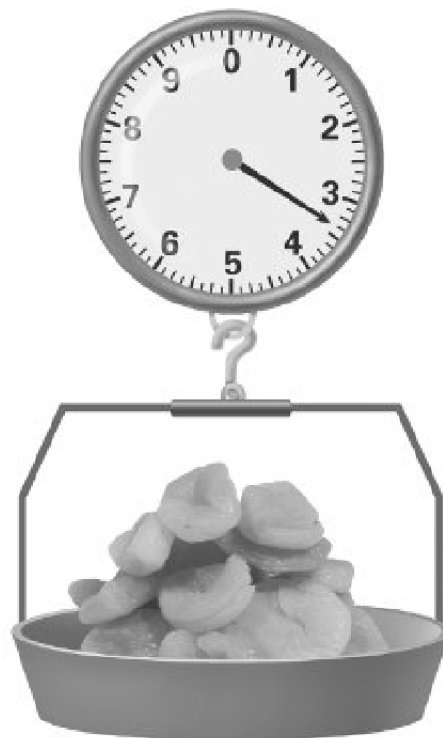


Possible answer: I chose a price of \$5.99. The total cost of the ingredients is \$5.33. In order for the company to make a profit, the price must be greater than \$5.33. I chose a price of \$5.99 because it is greater than \$5.33, but it does not make the Apple Cherry Mix seem too expensive.

4

Go Beyond

- Here are the ingredients in one bag of Apricot Cranberry Mix.
 $\frac{2}{3}$ pound of dried apricots
 $\frac{3}{4}$ pound of dried cranberries
 $\frac{1}{4}$ pound of slivered almonds
- The company makes a large batch of Apricot Cranberry Mix using 60 pounds of dried apricots.
- How many pounds of dried cranberries and slivered almonds should the company use in this batch?
- How many bags of Apricot Cranberry Mix can they make from this batch?



$67\frac{1}{2}$ pounds of dried cranberries

$22\frac{1}{2}$ pounds of slivered almonds

The company can make 90 bags of Apricot Cranberry Mix from this batch.