Activity 14 Assessment
Developing Fluency with Operations

Developing Fluency with Operations

Identifies known and unknown information in a problem	Identifies the operation(s) needed to solve the problem	Solves problems involving some operations but not others	Solves problems involving all operations
The school pays $186.49, including taxes, to rent a cotton candy machine and all the supplies needed to fill 300 bags. They can sell each bag for $1.50. The profit is the money earned from the sales less the costs. If they sell all 300 bags, what is their profit? "I know the costs, number of bags they will sell, and price they will charge. I need to determine how much profit they will earn."	"To determine the money they will earn, I need to multiply the price they will charge by the number of bags they sell. I'm not sure how I'll then determine the profit."	"The earnings are: $300 \times \$1.50 = \$450$. Now, I know that I need to subtract the costs to determine the profit. $450 - 186.49 = 263.51$ The profit is $263.51. This matches one of the multiple-choice options, which is great."	"You asked me about the profit per bag and how much they could charge to earn at least $1 per bag. To determine the profit per bag, I can divide the profit by the number of bags. $263.51 \div 300 \approx 88$ The profit per bag is about 88¢. To earn at least $1 per bag, they need to charge at least 12¢ more per bag. That would be $1.62. Since we don't use pennies, they could charge $1.65, but I think it would be easier to make change if they charge $1.75."

Observations/Documentation