Name:_____

2.2.15 Station Activity: Algebraic Expressions

Write two *different* numeric expressions for the context below:

Maria bought 5 apples for $0.35 each.

How would the expression change if she spent $0.40 on each apple?

What if you didn't know how much each apple cost, how could you write an expression?

For each context, four algebraic expressions are offered. Make a conjecture about the correctness of the expression. Then, evaluate it for the given value, and explain why the expression did or didn't work for the given context.

1. Ryan bought 3 CDs for x dollars each and a DVD for $15. Write an expression of how much money Ryan spent.

	Expression	Correct expression?	*Evaluate* $x = 7$	Did it work?	Why or why not?
a.	$3 + x + 15$				
b.	$15x + 3$				
c.	$15 + x + x + x$				
d.	$3x + 15$				

2. I started with 12 jellybeans. Sam ate 3 jellybeans and then Cyle ate y jellybeans. Write an expression for how many jellybeans were left.

	Expression	Correct expression?	*Evaluate* $y = 6$	Did it work?	Why or why not?
a.	$12 - 3 - y$				
b.	$12 - (3 - y)$				
c.	$12 - (3 + y)$				
d.	$9 - y$				

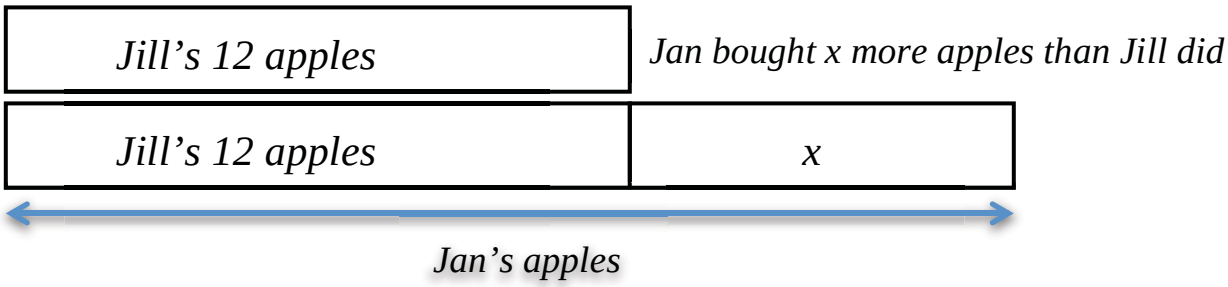
3. Kim bought a binder for \$5 and 4 notebooks for n dollars each. She received a 30% discount on the items. Write an expression for how much she spent.

	Expression	Do you think it will work?	*Evaluate* (use $n = 3$)	Did it work?	Why or why not?
a.	$0.70(5 + 4 + n)$				
b.	$0.70(4n + 5)$				
c.	$0.70(5n + 4n)$				
d.	$0.30(4n + 5)$				

For each context below, draw a model for the situation, label all parts, and then write an ***expression*** that answers the question. The first exercise is done for you.

Example: Jill bought 12 apples. Jan bought x more apples than Jill. Write an expression to show how many apples Jan bought.

Jan bought $12 + x$ apples.



4. Josh won 12 tickets. Evan won p tickets fewer than Josh. Write an expression to represent the number of tickets Evan won.