Name _____ *Writing algebraic equations*

An Equation Vacation!

Vernon and Vivian Variable, along with their kids, Van, Velma, and Veronica, are on their annual beach vacation. Using *x* as the variable, write an algebraic equation to represent each situation below.

1. Vivian tripled the number of seashells she collected. Now she has 51.

_____

2. Veronica used 18 of her ride tickets. Now she has 14.

_____

3. Van took 12 juice boxes to the beach to share equally among his friends. Each friend got 3 drink boxes.

_____

4. Vernon added 2 more scoops of ice cream to the family's super sundae. Now the sundae has 15 scoops of ice cream.

_____

5. Velma made a sand castle that had 24 towers. After a wave hit it, there were only 16 towers.

_____

6. Vivian bought 4 rolls of film and used a coupon for $3.00 off her purchase. She spent $9.00.

_____

7. Each boardwalk game Veronica played cost $2.00 each. She used $10.00 of her money on the games.

_____

8. Van spent $5.00 playing miniature golf and bought 2 snow cones to cool off. He spent a total of $9.00.

_____

Bonus Box: Look back at problem 6. If Vivian's film had cost $5.00 a roll, how much money would she have spent?

Answer Key for "An Equation Vacation!"

1. $3x = 51$
2. $x - 18 = 14$
3. $12 \div x = 3$ or $12 \div 3 = x$
4. $x + 2 = 15$
5. $24 - x = 16$
6. $4x - \$3.00 = \$9.00$
7. $\$10.00 \div x = \$2.00$ or $2x = 10$
8. $2x + \$5.00 = \$9.00$

Bonus Box: $17.00