Lesson 7 Problem-Solving Practice

Equivalent Expressions

- **1. AMUSEMENT PARKS** Four friends went to a local amusement park. Three of the friends bought ride tickets for *x* dollars, plus a game pass for \$10. The other friend bought just a ride ticket. Write and simplify an expression showing the amount of total money spent.
- **2. ALGEBRA** Translate and simplify the expression: the sum of fifteen and a number plus twelve.

- **3. AGE** Julianna is *x* years old. Her sister is 2 years older than her. Her mother is 3 times as old as her sister. Her Uncle Rich is 5 years older than her mother. Write and simplify an expression representing Rich's age.
- **4. REASONING** In the expression 30 + 40 + 70, Jillian added 30 and 40 and then 70, while Samuel added 30 and 70 and then 40. Who is correct? Explain your reasoning.

ICE CREAM For Exercises 5 and 6, use the following information provided in the table.

Toppings	Cost
Ice Cream (Scoop)	x dollars
Sprinkles	\$0.25
Hot Fudge	\$0.75
Whipped Cream	\$0.50
Nuts	\$0.35

5. Ten kids each order a scoop of ice cream. Five of the kids add sprinkles, 3 add nuts, and 2 add nothing extra. Write and simplify an expression that represents the total cost.

6. Write and simplify an expression that represents the total cost of ordering nuts on a scoop of ice cream and then adding hot fudge.