Use the information in each scenario to complete problems 6–10.

6. The concession stand at the football game sells cans of soda for $0.75 and bottles of water for $1.25. You have $10.00. Write an inequality to represent this situation. What can you buy?

7. A stained glass artist has a fixed cost of $150. It costs the artist $15 to produce each piece, but each piece sells for $35. The equation $C = 150 + 15n$ represents the total cost, C, for producing n pieces. The total revenue for n pieces is determined by the equation $R = 35n$. What constraint is necessary to include when modeling this situation?

8. Your dad needs to rent a chainsaw to cut down trees in your yard. The rental company charges $20 plus $6.50 per hour to rent the chainsaw. Your dad wants to spend no more than $50. What constraints apply to this situation? What is the maximum number of hours your dad can rent the chainsaw?

9. Jermaine has $10.00 to spend on ice cream. Three scoops cost $5.99, plus $0.75 for each topping. He always leaves a 20% tip for the cashier. Write an inequality and use it to determine if Jermaine can afford to buy a three-scoop ice cream with three toppings plus tip the cashier.

10. The local florist never has more than a combined total of 40 daisy and carnation bouquets and never more than 12 carnation bouquets. Write a system of inequalities that represents this situation. Be sure to include all constraints.