## NAME

Module 7 Solving Linear Equations and Inequalities of Two Variables
Lesson 4 Solving Consumer/Business Problems Using Linear Equations and Inequalities of Two Variables

## DATE

## Lesson Objectives

- Write and solve linear equations of two variables to find solutions to business/consumer problems.
- Write and solve inequalities of two variables to find solutions to business/consumer problems.

When solving business or consumer problems, make sure to define the
$\qquad$ —.
(1) Newt spent a total of $\$ 12.00$ on items at the concession stand. He bought candied ants for $\$ 1.00$ per bag and grilled grubs for $\$ 2.00$ each. If Newt bought 4 bags of candied ants, how many grilled grubs did he buy?

The SAT raw score is calculated by awarding one point for each correct answers and penalizing the student $\frac{1}{4}$ point for each incorrect answer. If a student's raw score is $40 \frac{3}{4}$ and the student answered 42 questions correctly, how many questions did the student answer incorrectly?
(3) The gym charges a membership fee of $\$ 75$ and a monthly fee of $\$ 20$. Write an inequality that shows the relationship between the maximum amount Newt has available to spend, $s$, and the cost of being a member of the gym for $m$ months. $\qquad$
(4. Use the inequality from question 3 to determine the maximum number of months Newt can be a member of Golden Gym if the most he can spend is \$210. $\qquad$
5. The Boudreaux family went to the movies and spent $\$ 24$ on tickets. The cost of an adult's ticket was $\$ 6$, while the cost of a child's ticket was $\$ 4$. Find all the possible combinations of adults and children in the Boudreaux family who went to the movies.
$\qquad$


When using a graph to solve a problem, for which a sensible solution requires whole numbers only, look for points on the line that are located where the horizontal and vertical grid lines cross. Those points will have
$\qquad$ coordinates.

