## Writing Equations and Inequalities Homework

Name:
Date:

Lucy has been assigned the following linear equations and inequality word problems. Help her solve each problem below by using a five step plan.

- Drawing a Sketch (if necessary)
- Defining a Variable
- Setting up an equation or inequality
- Solve the equation or inequality
- Make sure you answer the question

1. You are trying to save $\$ 20$ a week to buy a new CD player. During the last 4 weeks you have saved $\$ 35, \$ 15, \$ 10$, and $\$ 12$. How much do you need to save this week to average $\$ 20$ for the 5 weeks?
2. On an algebra test, the highest grade was 42 points higher than the lowest grade. The sum of the two grades was 138 . Find the lowest grade.
3. When 6 is added to four times a number, the result is 50 . Find the number.
4. The sum of 3 consecutive integers is 159 . Find the 3 numbers.
5. The width of a rectangle is 8 inches more than the length. The perimeter is 32 . Find the length and width of the rectangle.
6. Five times the sum of a number and two is thirty-five. Find the number.
7. Twelve subtracted from three times a number is fifteen. Find the number.
8. Twice a number added to seven is thirteen. Find the number.
