Algebra 1 Project

For the project this quarter, you are designing an analog clock face using the information you have learned so far this quarter. This project is worth 25 points. Your guidelines are:

- You may not copy the example used in class or use any of the examples from class or this handout. You are to do your own work!
- The dimensions of the clock face can be no larger than 12 inches x 12 inches.
- You are to be creative! Use color, pictures, etc. The choice of materials is up to you! However, be aware that these clocks will be posted in the classroom so neatness does count, and your clock face should be sturdy enough to put on the wall.
- You may work with a partner (one other person only), BUT the grade will be the same for both of you.
- You are to use expressions and equations that when solved will equal a number on the clock face. For example, $2 + 2 = 4$ for 4 o’clock. Expressions and equations must be algebraically correct.
- You must have at least six (6) expressions or equations that use a variable.
- You are to use the topics that we have covered this semester. However, you are to use the topic no more than one time. For example, you may use the multiplication identity $(12 \times 1)$ only once.

Topics that have been covered are listed below.

- Adding and Subtracting Real Numbers
- Absolute Value
- Multiplying and Dividing Real Numbers
- Properties of Zero
- Addition Identity
- Multiplication Identity
- Powers
- Exponents
- Square Roots
- Order of Operations (Can be used more than once as long as you use one of the other topics with it.)
- Commutative Property
- Associative Property
- Distributive Property
- Functions
- Solving Equations and Adding or Subtracting
- Solving Equations by Multiplying or Dividing
  - Two Step and Multi Step Equations
  - Variables on Both Sides
  - Rates
  - Ratios
- Proportions
- Similar/Corresponding Angles & Corresponding Sides
- Percents
- Simple Interest
- Percent Change
- Commission
- Markups
**What Do I Turn In?**

- The clock face using expressions and equations instead of numbers.
- A solution sheet showing the work that proves the solution equals the number it replaces. This sheet should be in numeric order. This can be typed or handwritten neatly and attached to the back of the clock face.
- If you work with a partner, both names should be on the solution sheet and the back of the clock.
- This is due by October 1, 2010.

**How Will I Be Graded?**

- (18 points) You will be graded on the creativity and accuracy of your expressions and equations including the solution sheet.
- (7 points) You will be graded on the overall neatness and creativity of the clock face. For example, a clock face that appears to be done at the last minute through sloppy work, hastily scribbled expressions and equations, misspellings, etc. will not receive full credit. However, a clock face that is neatly done and shows a creative effort will be scored higher. Your ability to follow the guidelines of the project will be included in this portion.