Quiz 4

This is a two-stage quiz. During the first stage, use your knowledge & calculator to take this quiz. You have 15 min. In the second stage, you are now welcome to use your books, notes, and students in the class to retake the same quiz. You have 15 min. to write one solution (with everyone's name on it!!!) to be turned in for the group.

Show *all* your work. Reasonable supporting work must be shown for any partial credit.

1. [2] The work below is wrong. Find the error(s) & try to detect the reason for the error.

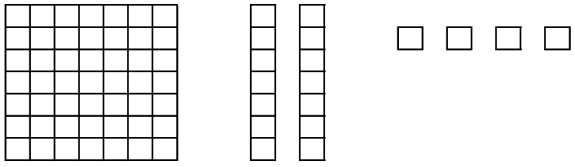
   $84 - 36 = (80 + 4) - (30 + 6) = (50 + 30 + 4) - (30 + 6) = 50 + 4 + 6 = 50 + 10 = 60$

2. [2] Let a and b be whole numbers. Is the following statement always true, sometimes true, or never true? Briefly justify your answer.

   $$a - b = b - a$$

3. Consider the number represented with one flat, 2 longs, and 4 units shown below.

   (a) [2] Write the number of units in positional notation for the given base.

   (b) [4] Add the above number to 13_{five}. Provide steps as you would for a 2nd grader.