Turn in your solution to at least two of the problems. Explain your solution in full sentences. Give detailed reasonings. Include diagrams and figures if appropriate.

Problem 1. In our garden we call a line a tree row if there are exactly 3 trees on that line. How can we plant 9 trees in the garden to create exactly
   (1) 8 tree rows;
   (2) 10 tree rows?

Problem 2. Divide a $5 \times 5$ paper square into 25 equal small squares along a square grid. Cut out the middle small square. How can we cut the resulting piece of paper into 2 pieces so that we can build a $2 \times 2 \times 2$ paper cube from the two pieces by folding?

Problem 3. We asked a group of 5 people about the number of friends they each had within this group. We got the following answers:
   • A: I have 4 friends.
   • B: I have fewer friends than A has.
   • C: I have as many friends as D has.
   • D: I have one fewer friends than E has.
   • E: I have an odd number of friends.

Are C and D friends?

Problem 4. Solve the inequality $|x - 1| + |2x - 6| \geq 3$. 