Coding Kata: Banker and a Sloth

A coding kata that places emphasis on requirements gathering, math and TDD development.

How to complete Kata:
1. Have a written list of prioritized requirements.
    a. List should include designation of MVP requirement or a feature request on each item.
    b. List should also define requirements that may not be achievable and alternatives that are achievable. (i.e. embed a star trek video to meet the requirement of creating a teleportation device)
2. TDD starting at the item on the list with the highest priority.
3. Reach MVP Status
4. Bonus: Complete Feature Requests.

You have just been hired as a banker at your local bank. Your boss, Mr. Sloth, is arrogant and clueless. It's your first day at work and Mr. Sloth approaches your teller station and demands that you solve a "problem" for him by the end of the day.

Mr. Sloth: "I need you to tell me the total number of combinations there are when giving change (ones, fives, tens, twenties, fifties and hundreds) for $1,000. "
You: "Right away, sir."
Mr. Sloth: "I need you to write down the algebraic formula you used to find your answer."
You: "I am working on it as we speak, kind sir."
Mr. Sloth: "Do this by 5pm or your fired."
You: "Spectacular."
Mr. Sloth: "You will also be required to automate the process for giving out change to customers as they come to your teller station. We are running short on change and lower denomination bills (ones and fives) so make sure to use as many twenties, fifties and hundreds while using the lowest number of coins, ones and fives. I also demand that you evenly dispense the number coins, ones and fives that you use."
You: "sigh…"
Mr. Sloth: "If customers are dissatisfied with your automation, you will be fired on the spot. Also, if you do not evenly dispense all coins, ones and fives, you will be fired at end of the day."
You: "sigh…"
Mr. Sloth: "As an added incentive, if you can also tell me the total number of combinations when giving change for $1,000 using only pennies, nickels, dimes, quarters and silver dollars, I will promote you to my personal assistant and increase your yearly salary by $3,200."

Your about to quit and walk out the door, when your mind drifts off to your loving wife with a broken hip at home with your 11 children. Realizing that you have no choice, you decide to try to find and hire developer on your lunch break.