Name: \_\_\_\_\_

In this lab run through the 5 steps. Please ensure you show all of your work. This means you will need to use lined paper.

Step 1:

- Choose two items from the list below
  - New Truck: \$22,599.00-\$77,780.00
  - New House: \$ 90,000.00-\$459,000.00
  - Renovations: \$5,000.00-\$10,000.00
  - A new home theater system: \$1,199.99-\$16,558.00
  - A new stove: \$1,898.00-\$3,299.99
  - A new fridge: \$1,698.00-\$7,948.00

Step 2:

- Select a principle (make sure it is realistic to what you would likely have)
- Also, the principle needs to be less than the amount you need
  - o **\$1000.00**
  - o **\$5000.00**
  - o **\$10,000.00**
  - o **\$20,000.00**

Step 3:

- Select a rate (remember the larger the rate the larger the fee)
  - 2.5% (\$25.00 annual fee)
  - o 3.25% (\$32.50 annual fee)
  - 25% (\$250.00 annual fee)
  - 30% (\$300.00 annual fee)

Step 4:

- Using simple interest (I=Prt)
  - Calculate how long it would take to save enough money.
  - Remember to subtract out the annual fee (that is for 10 years at 2.5% you will have to subtract \$250.00 from your total).

Step 5:

- Using compound Interest (A=P(1+i)<sup>n</sup>)
  - Calculate how long it would take to save enough money.
  - Remember to subtract out the annual fee (that is for 10 years at 2.5% you will have to subtract \$250.00 from your total).
  - Hint: use the t values from step 4 to estimate the actual length of time
    - Make sure your calculated A value and actual A value are as similar as possible. This means you may have to try multiple values for n!!!