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$\qquad$ Block: $\qquad$
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
- \$1000.00
- \$5000.00
- \$10,000.00
- \$20,000.00

Step 3:

- Select a rate (remember the larger the rate the larger the fee)
- 2.5\% (\$25.00 annual fee)
- $3.25 \%$ ( $\$ 32.50$ 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 $\left(A=P(1+i)^{n}\right)$
- 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 $n!!!$

