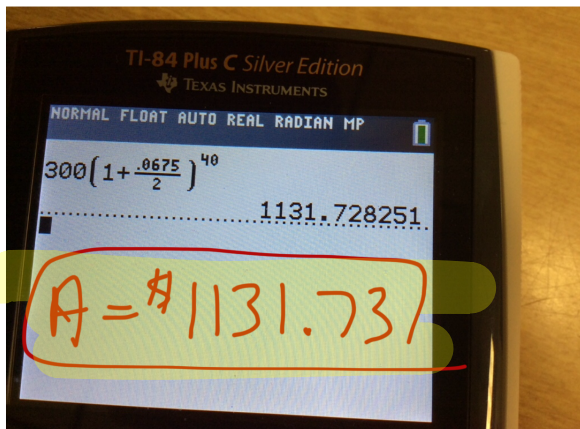


- 10) Determine the final account balance of an investment if \$300 is invested at an interest rate of 6.75% compounded semiannually for 20 years.

$$A = 300 \left( 1 + \frac{.0675}{2} \right)^{40}$$



- 5) Determine the amount of **interest** earned on a \$100,000 investment if it is invested at 5.2% annual interest compounded quarterly for 12 years.

$100000 \left( 1 + \frac{.052}{4} \right)^{4 \times 12}$   
.....  
185888.8657

Interest  
?

$\$ 185,888.87$   
    100,000 ← principal  
 $\$ 85,888.87$   
Interest

- 4) Determine the amount of **interest** earned on a \$2500 investment if it is invested at 5.25% annual interest compounded monthly for four years.

Calculator screen showing the following calculations:

$300(1 + \frac{.0675}{2})^{40}$	1131.728251
$100000(1 + \frac{.052}{4})^{4*12}$	185888.8657
$2500(1 + \frac{.0525}{12})^{12*4}$	3082.78279

Handwritten notes:

$$A = \$3,082.78$$

$$- 2500$$


---

Interest  $\$582.78$

- 1) A coin had a value of \$1.17 in 1995. Its value has been increasing at 9% per year. What is the value after 5 years?

Calculator screen showing the calculation:

$100000(1 + \frac{.052}{4})^{4*12}$	185888.8657
$2500(1 + \frac{.0525}{12})^{12*4}$	3082.78279
$1.17(1 + \frac{.09}{1})^5$	1.800190027

Handwritten notes:

$$A =$$

$$\boxed{\$1.80}$$