***Compound Interest.*** *For the next two problems apply folmula:* A = P(1 + i)n *and use scientic calculator.   
I – interest rate per period in decimal form, annual rate divided by number of periods per year  
P – deposit  
n –total number of deposits over all given years*

Problem 1.  


Problem 2.  


***Continuous Interest.*** *For the next two problems apply folmula: A =P and use scientic calculator.   
I – annual interest in decimal form  
P – deposit  
t – number of years*

Problem 3.   
$1,000 was desited on account that has continuous interest with annual interest rate 2%.  
How much will be on this account after 5 years?

Problem 4.  
Let’s say you put in a bank $5,000. How much will be on your account in 10 years  
if bank calculates continuous interest with annual interest rate 3%?

**Mortgage monthly payment.***For the next two problems apply folmula:* R =  *and use scientic calculator.   
I – interest rate per month in decimal form, annual rate in decimal form divided by 12  
P – principal, amount you borrow from bank  
n –total number of payments over all given years*

*If you have problem with your calculator to find   
find first and then divide 1 by this value.  
For example, find .  
Using function on calculator find = = 10.765  
Then = 1 /10.765 = 0.09289*

Problem 5.  
Calculate monthly payment on a mortgage $200,000.00 over 10 years.  
Annual percentage rate is 4.8%

Problem 6.  
Price for the house is $400,000. You paid $40,000 as down payment and the rest took as mortgage.  
Calculate monthly payment on this mortgage over 30 years. Annual percentage rate is 6%.