

University of Bahrain  
Bahrain Teachers College  
TC2MA324: History of Mathematics  
Dr. Abdulla Eid  
Spring 2015



## Quiz 6

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

1. (2 points) Find the Maturity (future) value *and* the amount of simple interest of saving 300 **BHD** at 3% for 11 months.
2. (2 points) You bought a laptop that costs 430 **BHD** using a credit card that charges 1.5% annually. Supposed you have not paid anything for 18 months. How much you owe the bank and how much is the bank interest?
3. (3 points) Find the maturity *and* the saving interest of investing 100 **BHD** each month in an account that pays 2.2% annually for 10 years?

4. (3 points) The inflation rate in the Kingdom of Bahrain for March 2015 was 2.2% per year. Assume a fast-food meal costs 1.800 **BHD** and assume the inflation rate will continue as it is, how many months it will take for the meal to cost 2.000 **BHD**?
5. (3 points) 1. Derive a formula that can be used to find the monthly installment  $R$  of an amortization of a loan  $P$  with annual rate  $r$  to be paid back in  $n$  years.
2. Use the formula you derived above to find the monthly installment of a house costs 144,000 **BHD** with interest rate 6% annually and to be paid back in 30 years.