



Financial Algebra

MID TERM STUDY GUIDE II

Name: _____

Date: _____

Answer each of the following questions showing your work in the space provided.

11. Mary opened a checking account on November 6 with a \$2,700 deposit. The account pays 3.75% interest compounded daily. On November 7, she deposited \$300 and withdrew \$200 on the 8th. Fill in the information on the ledger below.

Date	Nov. 6	Nov. 7	Nov. 8
Opening balance			
Deposit			-----
Withdrawal	-----	-----	
Principle for interest			
Interest			
Ending balance			

12. Emily put \$5,300 in an account that pays 3.0% interest compounded monthly in an account for 5 years. Find her interest.
13. This year, Matt deposited \$1,575 into a one-year CD that pays an interest rate of 2.15% compounded daily. What is his annual percent yield rounded to the nearest hundredth of a percent?

14. Find the interest on a \$7,500 deposit for 2.75 years at 2.15% interest compounded continuously.

15. Find the limit of a function of x , $f(x) = \frac{15x-20}{3x+15}$, as x approaches infinity.

16. John wants to have \$100,000 in an account at some time in the future. He can deposit \$150 per month into an account that pays 3.75% and is compounded monthly. How long, in years to the nearest 10th, must he make deposits?

17. Hailey went on a trip to Disney World and lost her credit card. Someone found the card and charged \$125 on it that same day. Hailey didn't notice the loss until three days later when she called her credit company and reported the card lost.

How much of the \$125 will she have to pay? _____

How much would she pay if \$250 had been charged? _____

How much of \$125 would she pay the card wasn't lost but the number was stolen? _____

18. John can afford \$500 a month and wants to borrow \$25,000 at an APR of 7.25%. To the nearest tenth of a year, how long will it take to pay back the loan?

19. Jake had the following daily balances on his credit card for a recent billing period. He did not pay the card in full the previous month, so he will have to pay a finance charge.

three days at \$454.75

twelve days at \$907.55

eight days at \$657.55

seven days at \$1,149.34

What was Jake's average daily balance?

20. Emma takes out a \$26,900 five-year new car loan with an APR of 6.95%. What is her finance charge for this loan rounded to the nearest hundred dollars?