Supplemental Instruction Handouts

Business Math

Review of Chapters 6, 7 & 8

1. Calculate interest earned for an investment of $300 from October 15, 2013 to April 27, 2014 with an annual interest rate of 9.25%.

2. Determine the principal to be deposited to earn $55.75 in 185 days at 11%.

3. What is the annual interest rate earned from a $1,500 investment that earned interest of $33.29 in 85 days?

4. Determine the number of days it will take for $2,500 to earn $143.84 at 7.5%.

5. A loan of $880 can be repaid in 15 months by paying the principal sum borrowed plus $104.50 interest. What was the rate of interest charged?

6. In how many months will $1,290 earn $156.68 interest at 13.25%?

7. What amount of money will accumulate to $1,000 if invested at 12.75% for 10 months?

8. If the maturity value of a $2,400 investment for 15 months is $2,715, what rate of interest did this investment earn?

9. If an investment of $1,254.07 grew to $1,330 at a rate of 13%. How many days did it take?

Use the following information for the next 2 questions:

If you make an investment of $15,000 in a 90 – day term deposit paying interest at 3.3%.

10. What will be the maturity value?

11. If upon maturity you decide to “roll it over” into a 120 – day term deposit paying an interest of 2.9%, what will be the maturity value?

Academic Success Centre www.rrc.mb.ca/asc

These questions were compiled by Michael Reimer for the Academic Success Centre.
12. Calculate the price of a $50,000, 91 – day Province of Manitoba Treasury bill on its issue date if the current market rate of return is 2.5849%.

13. If Joelle purchased a $25,000, 182 – day T – bill discounted to yield 4.25% and sold it 35 days later to yield 3.5% how much did Joelle earn?

14. What will $5,000 grow to if it is invested at an interest rate of 10.5% compounded annually for 5 years? Calculate the interest earned.

15. If you invested $1,500 today, what would it grow to in 7 years? The interest rate for the first 3.75 years was 3.579% compounded monthly and 4.961% compounded quarterly for the rest of the 3.25 years.

16. Glen made two deposits into his savings account. The first deposit of $500 was put in today and the second deposit of $1,200 is to be paid 18 months from today. How much would Glen have in his savings account four years from today? Interest is 8.2% compounded quarterly for the four years.

17. What amount paid today will be worth $10,500 in 15 months if interest is 5.6% compounded monthly? How much of a discount did you receive?

18. Andrew wants to have $100,000 in three years. He will put $25,000 into the investment at 18 months. During the next three years interest rates are going to be 3.25%, 3.75% and 3.50% compounded semiannually. How much would he have to invest today?

19. George is required to make a payment of $600 today and a second payment of $1,000 in 15 months. George has worked out an alternate plan with the creditor to make a payment of $500 in 6 months and an unknown payment in 24 months. How much of a payment would the creditor accept at 24 months if money is worth 5.651% compounded quarterly?

20. Your bank is willing to offer you a line of credit of $15,000 at prime plus 1%. You will pay your bank any accrued interest on the last day of each month. On August 12th you draw $5,000 and make a payment of $3,000 on September 20th. How much interest would you have to pay for August and September? The interest rate was 2% for August and September.