



Supplemental Instruction Handouts

Business Math

Chapter 13: Annuities

1. If upon retirement, in 25 years, OJ would like to receive a payment of \$500 at the end of each month for 15 years. How much would OJ have to invest today? The interest rate of 11.45% compounded semi – annually.
2. If Lee was able to defer his loan payments for 3 years and then make payments of \$750 monthly for 4 years. The first payment was required on the anniversary date of the loan. How much money did Lee borrow? The interest rate during the deferral period was 4.85% compounded quarterly and then changed to 5.35% compounded semi – annually during the annuity period.
3. If Sherry has \$250,000 saved up in her RRSP and was to let the RRSP grow until she retires in 10 years. When Sherry retires she wants to receive a payment of \$2,450 every month. If Sherry receives her first retirement payment on the date she retires, how long will she receive the payments for? The interest rate for the deferral period is 5.32% compounded monthly and after Sherry retires the interest rate is 4.87% compounded quarterly.
4. If Kyle invests \$150,000 today into an RRSP and lets it grow for the next 15 years at 4.92% compounded monthly. He then will start withdrawing on the day he retires and receive monthly payments for the next 20 years at 5.25% compounded semi – annually. How much will Kyle receive for each payment?
5. Joan wishes to retire in 30 years. She is going to make payments of \$1,000 at the end of every six months into her RRSP for the next 20 years. If the RRSP earns an interest rate of 7.25% quarterly for all 30 years, how much money would be in the fund at the end of the 30 years?
6. If a perpetual scholarship of \$1,500 is to be awarded every year, how much money is required to fund this scholarship if money can earn 5.94% compounded annually?
7. If a scholarship has just been set up for students with a donation of \$50,000, how much can be paid out at the beginning of every six months if money is worth 6.23% compounded semi - annually?