Name: _____ Date: _____

BLM 8–12

Chapter 8 Practice Test

For questions 1 to 4, answer true (T) or false (F).

1. Semi-annual compounding will give more interest than monthly compounding, at the same annual interest rate.

2. A one-year investment will earn less interest at 4% per year, compounded semi-annually than at 4% simple interest.

3. Simple interest and annual compound interest, both at 6% per year, will add the same amount of interest to an investment at the end of one year.

4. The TVM Solver reduces the amount of time needed to perform calculations.

5. When money is invested at 8% per year, compounded quarterly, for $2\frac{1}{2}$ years,

A $n = 2.5$, $i = 8\%$
B $n = 10$, $i = 2\%$
C $n = 10$, $i = 4\%$
D $n = 5$, $i = 2\%$

6. An equivalent simple interest rate for an investment of $3000 at 4% per year, compounded semi-annually, for 2 years is

A 4% **B** 3.85%
C 4.12% **D** 8%

7. A TVM Solver can be used to find

A interest rate
B present value
C number of years
D all of the above

8. How much needs to be invested today to have $25 000 in 10 years, at 6% per year, compounded semi-annually?

9. Marty borrowed money for 3 years at 4% per year, compounded quarterly. If he paid $7549.73 at the end of the 3 years, how much was the loan?

10. Make a table of values and sketch a graph to show how $800 will increase in value over 7 years, invested at

a) 10% simple interest
b) 10% per year, compounded annually

11. Jo owes $3175 in 4 years. If interest is 4.3% per year, compounded semi-annually, how much would her creditor accept today to pay off the loan?

12. For how many years would $3000 need to be invested at 4.2% per year, compounded semi-annually, to have $5000?

13. You invest $7000 at 4.7% per year, compounded semi-annually. After how many years will the investment be worth $10 000?

14. David invests $4000 in a plan with interest compounded monthly. What yearly interest rate will increase his investment to $5000 after 5 years?