

**FINANCIAL MANAGEMENT**  
**MBA 440**  
**Prof. Dalia Marciukaityte**  
**Solutions to Practice\_Quiz2\_TVM\_exch**

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1. (2 points)

You want to start your business and you expect that for the first few years you will have no income from your new business. You need to evaluate if you have enough savings to generate income for those years. Currently, you have savings of \$100,000. You invested them and expect to earn 8% per year. How much can you withdraw each year (the same amount at the end of each year) for the next three years so this investment would be \$0 at the end of the three years. (Round your final answer to the same number of decimal places as you see in the answers before comparing; if the next digit is 5 or more, round up; otherwise, round down—use these rules for all problems in this class.)

- \*a. \$38,803.35
- b. \$33,386.68
- c. \$30,803.35
- d. none of the above.

2<sup>nd</sup> CLR TVM

100000 +/- PV

8 I/Y

3 N

CPT PMT

2. (2 points)

You want to save \$2,000,000 for your retirement (this is the amount you want to have immediately after making the last contribution). You think you can earn 7% per year. You will be working for 40 years and making the same contribution at the end of each year. How much should you contribute each year?

- a. \$49,320.76
- b. \$16,770.98
- \*c. \$10,018.28
- d. none of the above.

2<sup>nd</sup> CLR TVM

2000000 FV

7 I/Y

40 N

CPT PMT

3. (2 points)

The current value of a stock market index is 23,450. If it will grow at 11% per year, what will be its value in 10 years?

- a. \$3,981.84
- b. \$8,258.73
- \*c. \$66,584.42
- d. \$66,905.59

2<sup>nd</sup> CLR TVM

23,450 +/- PV

11 I/Y

10 N

CPT FV

4. (2 points)

The value of a stock market index was 1 120 years ago. If the current value is 20,101, what was the growth rate? (all growth rates, interest rates, etc. are per year unless specified otherwise—this is a common convention and we will use it for the rest of the class)

- \*a. 8.61%
- b. 6.73%
- c. 4.50%
- d. none of the above.

2<sup>nd</sup> CLR TVM

1 +/- PV

20101 FV

120 N

CPT I/Y

5. (2 points)

The price of 1 euro (exchange rate) is \$1.21. How much will it cost in dollars to obtain 567 euros? How much will it cost in euros to obtain 567 dollars?

- a. \$468.60 and 686.07 euros
- \*b. \$686.07 and 468.60 euros
- c. None of the above.

$$\text{\$1.21} \times 567 \text{ euros} = \text{\$686.07}$$

$$\text{\$567} / \text{\$1.21} = 468.60 \text{ euros}$$