## Math 1313

## Homework 10

## Section 4.2

1. The choices for problem number 6 part a from the book are given below
a. Future Value with compound interest
b. Present Value with compound interest
c. Future Value of an Annuity
d. Present Value of an Annuity
e. Future Value with simple interest
2. The choices for problem number 6 part $b$ from the book are given below
a. $\$ 17,165.85$
b. $\$ 6,620.46$
c. $\$ 21,464.51$
d. $\$ 1,581.51$
e. $\$ 18,852.92$
3. The choices for problem number 14 part a from the book are given below
a. Future Value with compound interest
b. Present Value with compound interest
c. Future Value of an Annuity
d. Present Value of an Annuity
e. Future Value with simple interest
4. The choices for problem number 14 part $b$ from the book are given below
a. $\$ 77,248.18$
b. $\$ 118,080.30$
c. $\$ 61,248.18$
d. $\$ 112,080.30$
e. $\$ 97,627.24$

## Use the following problem to answer questions 5 and 6.

Anh, a new college graduate, decides she needs a new car. Her local bank has an account that pays $2.2 \%$ per year compounded monthly for 3 years. If Anh deposits $\$ 325$ per month, how much will she have towards the purchase of her new car in 3 years?
5. Identify the type of problem.
a. Future Value with compound interest
b. Present Value with compound interest
c. Present Value of an Annuity
d. Future Value of an Annuity
e. Future Value with simple interest
6. Answer the question in the problem.
a. $\$ 11,700.00$
b. $\$ 10,953.39$
c. $\$ 12,497.50$
d. $\$ 11,312.23$

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e. $\$ 12,083.29$

## Use the following problem to answer questions 7 and 8.

Parents would like to have the funds for their child to have an allowance in college for 4 years. They want him to be able to withdraw $\$ 500$ each month. How much should they deposit into an account earning $1.35 \%$ per year compounded monthly.
7. Identify the type of problem.
a. Future Value with compound interest
b. Present Value with compound interest
c. Future Value of an Annuity
d. Present Value of an Annuity
e. Future Value with simple interest
8. Answer the question in the problem.
a. $\$ 23,350.73$
b. $\$ 17,579.13$
c. $\$ 24,000.00$
d. $\$ 24,645.59$
e. $\$ 33,460.90$

## Use the following problem to answer questions 9 and 10.

Shady Oaks, a nursing home, bought a new van. They made a down payment of $\$ 1,500$ and financed the remaining balance with a lending company. Their monthly payments are $\$ 482.65$ for 5 years at $2.49 \%$ per year compounded monthly. What was the original cost of the van?
9. Identify the type of problem.
a. Future Value with compound interest
b. Present Value with compound interest
c. Future Value of an Annuity
d. Present Value of an Annuity
e. Future Value with simple interest
10. Answer the question in the problem.
a. $\$ 30,202.35$
b. $\$ 25,702.35$
c. $\$ 28,702.35$
d. $\$ 24,202.35$
e. $\$ 27,202.35$

